



## **COOK/CHILL INCLINED AGITATOR STATIONARY MIXER KETTLES**

- MODELS:**  IA-MKDL-60-CC  IA-MKDL-200-CC  
 IA-MKDL-100-CC  IA-MKDL-300-CC  
 IA-MKDL-150-CC



### **Cleveland Standard Features**

- Full 60,100,150,200 or 300 gallon working capacity
- Electrically driven, Inclined Agitator Mixer Arm
- Variable mixer speed control
- Heavy duty, removable breaker bar
- Flush mounted, easily removable temperature probe
- Simmer control for cooking delicate products
- 3" diameter air operated, flush mounted piston draw-off valve (requires air compressor)
- Spiral flights for even water cooling
- Motor protection shield
- Easily removable agitator without the use of tools
- Spring loaded scraper blades
- Kettle mounted valve box for single point utility connections
- Heavy duty rim bar
- 100 psi steam jacket rating and safety valve
- Type 316 stainless steel for all food contact surfaces
- Water fill faucet with swing spout
- NSF approved
- Accepted for use in USDA inspected facilities

**Note:** This COOK/CHILL mixer kettle requires a control panel for operation which must be specified separately.

### **Standard Features for Kettle Control Center:**

- Solid state temperature control with digital read-out
- Time/Temperature Chart Recorder to provide permanent record of Batch Processing
- Automatic and manual steam control
- Automatic and manual water cooling
- Simmer control for delicate products
- Automatic water meter with accumulative "add on" button and digital readout
- U.L. approved

### **Options & Accessories**

- Single or dual remote control center
- Stainless steel lift-off cover
- Tilt-out agitator
- Larger models, up to 800 gallons available
- 3" flush mounted ball valve
- Loading bucket and dolly
- Electric chain hoist for lifting the product load

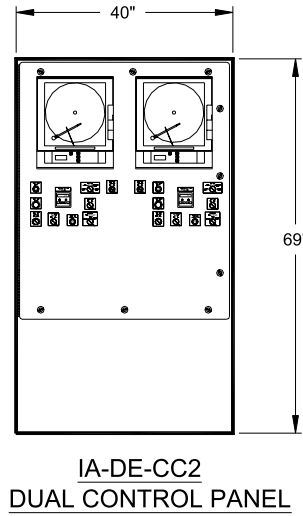
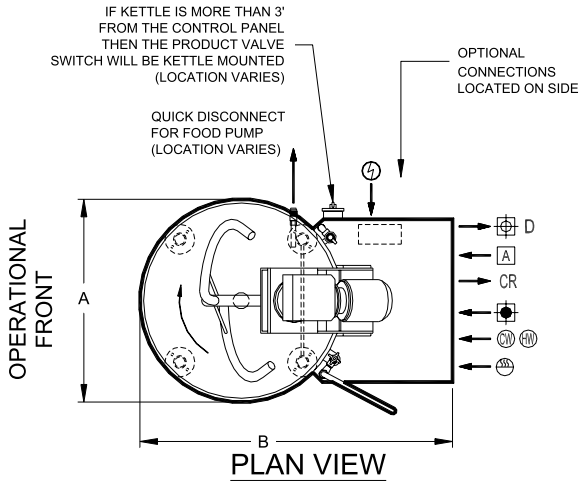
ITEM NUMBER \_\_\_\_\_

JOB NAME / NUMBER \_\_\_\_\_



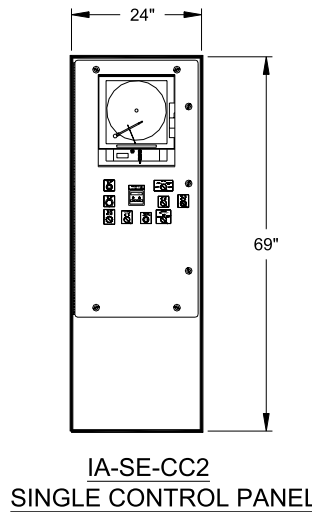
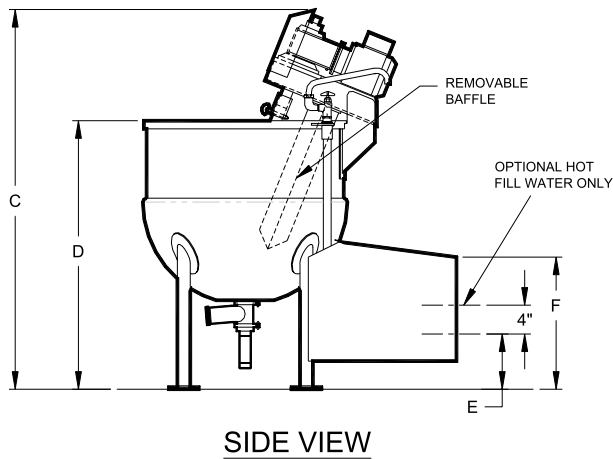
### **Short Form Specifications**

Shall be CLEVELAND Model IA-MKDL- \_\_\_-CC; COOK/CHILL STATIONARY INCLINED MIXER KETTLE, \_\_\_ gallons; leg mounted; 2/3 jacketed, direct steam; 100 psi Steam Jacket Pressure Rating; 316 Stainless Steel Liner; electrically driven Inclined Agitator; Variable Mixer Speed Control; 3" diameter air operated, flush mounted Piston Draw-Off Valve; spring loaded Scraper Blades; flush mounted Temperature Probe; Automatic Water Meter; Water Fill Faucet with swing spout; Time/Temperature Chart Recorder (located in Control Center).



MINIMUM CLEARANCE FOR KETTLES	
FRONT	36"
SIDE	12"
REAR	12"

NOTE:  
CONTROL PANEL  
DEPTH 18 3/4"



- ELECTRICAL POWER TO AND FROM CONTROL PANEL**
- CONTRACTOR MUST CUT ENTRY HOLE
  - TOP OR BOTTOM POWER ENTRY RECOMMENDED
  - MUST USE PROPER CONNECTIONS TO MAINTAIN U.L. LISTING

## DIMENSIONS

MODEL	A	B	C	D	E	F	ELECTRICAL PER KETTLE - 208V/3PH/60Hz	R.P.M.
IA-MKDL-60-CC	32"	52"	64"	45 1/2"	8"	24"	10 AMPS	6-35
IA-MKDL-100-CC	39"	58 1/2"	70"	49 1/2"	9"	28"	12 AMPS	6-35
IA-MKDL-150-CC	45"	63"	79"	52 1/2"	9"	30"	15 AMPS	6-32
IA-MKDL-200-CC	49"	67"	84"	57 1/2"	9"	32"	15 AMPS	6-32
IA-MKDL-300-CC	56"	79"	89"	62 1/2"	11"	36"	25 AMPS	6-32

## UTILITY CONNECTIONS

MODEL	CHILLED WATER INLET	CHILLED WATER RETURN	COLD POTABLE WATER	** HOT WATER	CONDENSATE RETURN	DRAIN	AIR INLET	STEAM
					CR	D	A	
IA-MKDL-60-CC	3/4" 15 GPM	3/4"	1/2" 15 GPM	1/2" 15 GPM	1/2"	3/4"	1/2" 1 CFM	3/4" 320 lbs/hr
IA-MKDL-100-CC	1" 20 GPM	1"	3/4" 20 GPM	3/4" 20 GPM	3/4"	1"	1/2" 1 CFM	1" 525 lbs/hr
IA-MKDL-150-CC	1 1/4" 20 GPM	1 1/4"	3/4" 20 GPM	3/4" 20 GPM	1"	1 1/4"	1/2" 1 CFM	1 1/4" 780 lbs/hr
IA-MKDL-200-CC	1 1/4" 25 GPM	1 1/4"	3/4" 20 GPM	3/4" 20 GPM	1"	1 1/4"	1/2" 1 CFM	1 1/4" 1050 lbs/hr
IA-MKDL-300-CC	1 1/2" 30 GPM	1 1/2"	3/4" 20 GPM	3/4" 20 GPM	1"	1 1/2"	1/2" 1 CFM	1 1/2" 1575 lbs/hr

\*\* HOT FILL WATER IS OPTIONAL  
65 PSI STEAM OPERATING PRESSURE IS RECOMMENDED

(NOT TO SCALE)  
SECT. XIV PAGE 12  
0600  
Litho in USA

## **INSTALLATION INSTRUCTIONS FOR INCLINED AGITATOR KETTLE**

1. WHEN REMOVING THE KETTLE FROM THE PLATFORM, HANDLE WITH CARE TO PREVENT SCRATCHING OR ANY OTHER DAMAGE. IT IS IMPERATIVE THAT THE KETTLE BE LEVEL BEFORE BOLTING TO THE FLOOR. THIS WILL PREVENT ANY TWIST OR OUT OF ROUNDNESS TO THE KETTLE AND WILL STOP DEFLECTION OF THE AGITATOR. MAKE SURE THE KETTLE IS SECURELY BOLTED TO THE FLOOR AND FOLLOW THE PROCEDURE LISTED BELOW:
  - A. BECAUSE MOST FLOORS HAVE A PITCH TO ALLOW FOR DRAINING THE FLANGES CAN ONLY BE LOWERED APPROXIMATELY 1" DOWNWARD. IF THERE IS ANY VOID BETWEEN THE FLANGE AND THE FLOOR YOU MUST USE SHIMS TO FILL UP THE SPACE.
2. NEXT YOU MUST CHECK THE ALIGNMENT OF THE DRIVE SHAFT TO THE AGITATOR, PULL THE PULL PIN THAT HOLDS THE COUPLING IN PLACE. THEN SLIDE THE COUPLING DOWN AND BACK UP ONLY TO MAKE SURE THAT IT MOVES FREELY, IF NOT THERE IS SOME TWIST ON KETTLE LEGS AND IT MUST BE CORRECTED UNTIL THE COUPLING MOVES UP AND DOWN FREELY.

- NOTES:**
1. ALL WETTED PARTS IN CONTACT WITH PRODUCT TO BE T-316 SST AND ALL OTHERS TO BE T-304 SST UNLESS NOTED OTHERWISE
  2. VESSEL TO HAVE A #4 FINISH INSIDE & OUTSIDE.
  3. 3 1/4" OF FREEBOARD WITH A VOLUME OF 14.5 GALS.
  4. KETTLE INTERIOR DIMS: 36" DIA x 32" DP.
  5. OVERALL DIMS ARE ± 1"

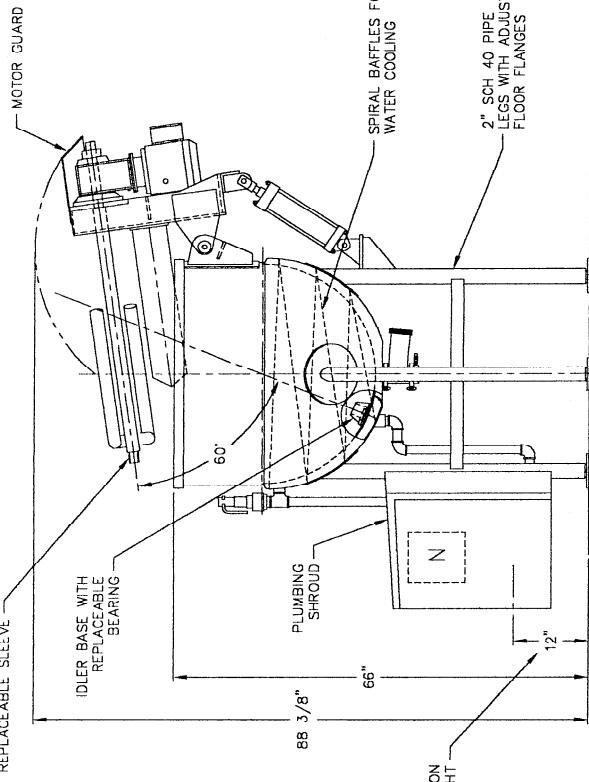
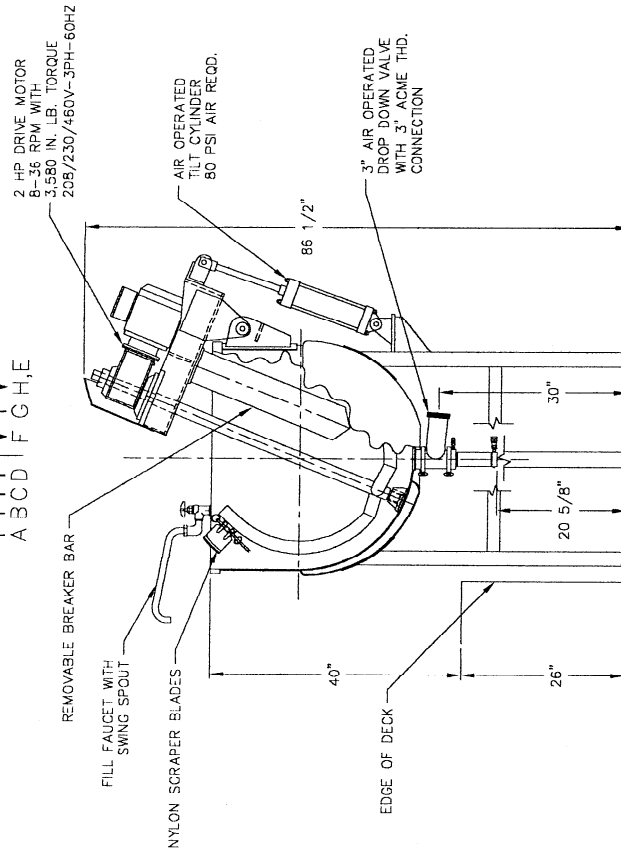
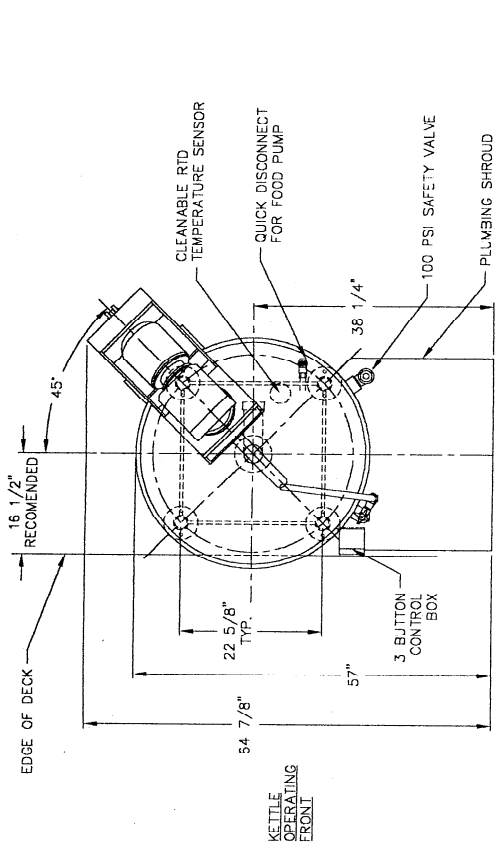
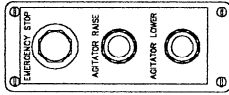
**UTILITY CONNECTIONS:**

- A) 1" NPT STEAM IN
- B) 3/4" NPT COLD POTABLE WATER
- C) 3/4" NPT HOT POTABLE WATER
- D) 1" NPT COOLING WATER IN
- F) 1" NPT CONDENSATE RETURN
- G) 1/2" NPT AIR IN
- H,E) 1" NPT COOLING WATER OUT/JACKET DRAIN
- N) CONTROL/MOTOR POWER FROM MAIN CONTROL PANEL

**SPECIFICATIONS:**

VESSEL DESIGNED AND BUILT TO SECTION VIII, DIVISION I OF THE 1998 A-2000 ASME CODE FOR MAX. WORKING PRESSURE OF 100 PSI AT 338 °F. VESSEL TO BE STAMPED AND NATIONAL BOARD REGISTERED WITH U1 CERTIFICATE FURNISHED TO CUSTOMER.

**3 BUTTON CONTROL BOX**



REV.	DESCRIPTION	BY	DATE
	REVISIONS		

DESIGNED BY	JES	DATE	8/9/01
APPROVED BY			
SCALE	NONE		

QUANTITY	1
DESCRIPTION	100 GAL INCLINED AGITATOR KETTLE WITH TILT OUT AGITATOR
REQ. NO.	D
REQ. DATE	9074-ICP
REV.	
DATE	
BY	
1 OF 1	

**J.C.PARDO & SONS INC.**  
 1250 REAMES RD., BALTO MD, 21220  
 PHONE (410) 981-3900 FAX (410) 981-3900

**NOTES:**

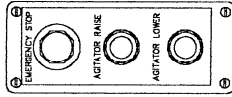
1. ALL WETTED PARTS IN CONTACT WITH PRODUCT TO BE T-316 SST AND ALL OTHERS TO BE T-304 SST UNLESS NOTED OTHERWISE.
2. VESSEL TO HAVE A #4 FINISH INSIDE & OUTSIDE.
3. 4 1/2" OF FREEBOARD WITH A VOLUME OF 32 GALS.
4. KETTLE INTERIOR DIMS: 46" DIA. x 40" DP.
5. OVERALL DIMS ARE ± 1"

**UTILITY CONNECTIONS:**

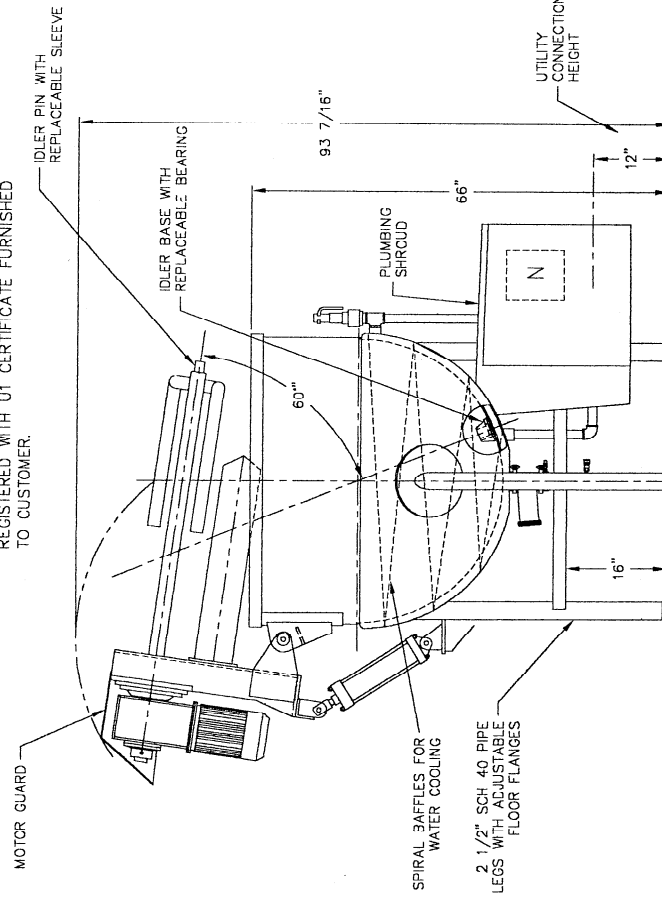
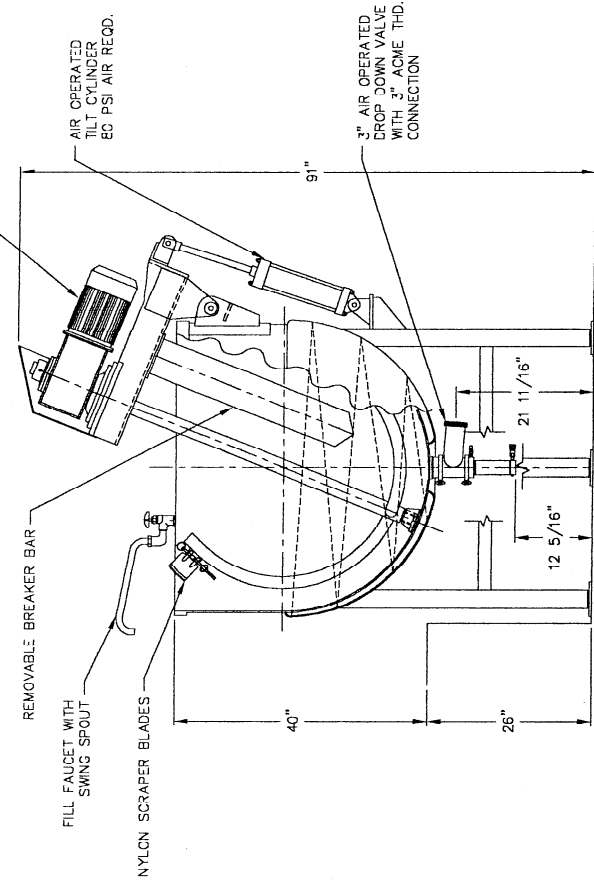
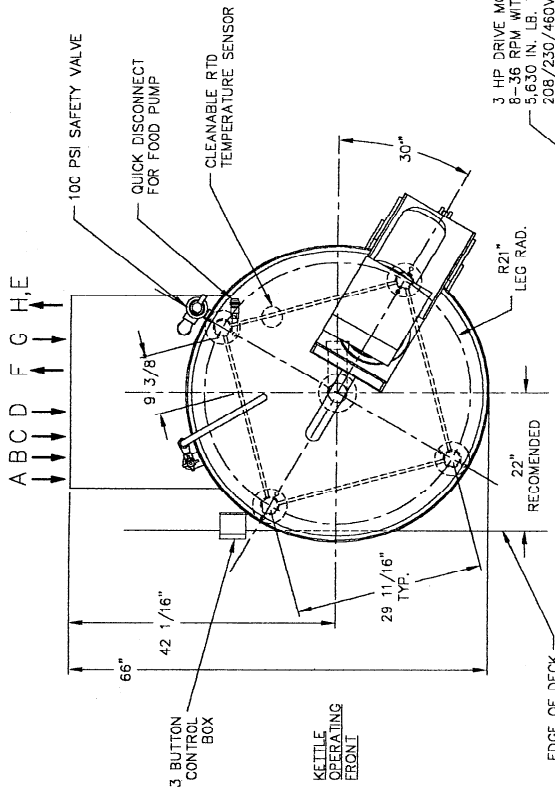
- A) 1 1/4" NPT STEAM IN
- B) 3/4" NPT COLD POTABLE WATER
- C) 3/4" NPT HOT POTABLE WATER
- D) 1 1/4" NPT COOLING WATER IN
- F) 1 1/4" NPT CONDENSATE RETURN
- G) 1/2" NPT AIR IN
- H,E) 1 1/4" NPT COOLING WATER OUT & JACKET DRAIN
- N) CONTROL/MOTOR POWER FROM MAIN CONTROL PANEL

**SPECIFICATIONS:**

VESSEL DESIGNED AND BUILT TO SECTION VIII, DIVISION 1 OF THE 1998 ASME CODE FOR MAX. WORKING PRESSURE OF 100 PSI AT 338 °F. VESSEL TO BE STAMPED AND NATIONAL BOARD REGISTERED WITH U1 CERTIFICATE FURNISHED TO CUSTOMER.



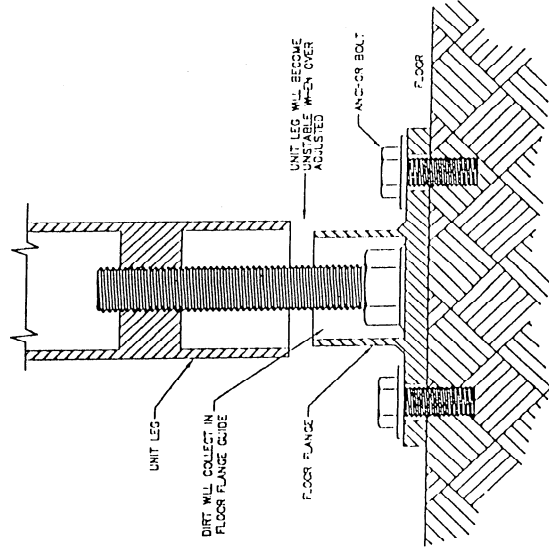
**3 BUTTON CONTROL BOX**



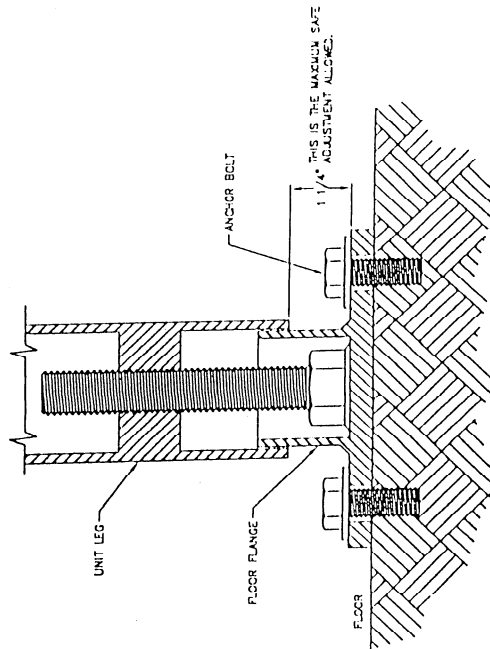
REV.	DESCRIPTION	BY	DATE	REVISIONS
<b>J.C.PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-3500 FAX (410) 381-3500				ORDER BY: JES DATE: 9/9/01 DRAWING NO.: NAME: NONE
200 GAL INCLINED AGITATOR KETTLE WITH TILT OUT AGITATOR <small>THIS DRAWING IS THE PROPERTY OF J.C. PARDO &amp; SONS INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF J.C. PARDO &amp; SONS INC.</small>				VALUE NUMBER: D 9075-JCP 1 of 1

NOTES:

AFTER UNIT IS LEVEL, ANCHOR ALL FLOOR FLANGES TO THE FLOOR BY USING AN ANCHOR BOLT IN EACH HOLE OF THE FLANGES.



INCORRECT ADJUSTMENT OF FLOOR FLANGE

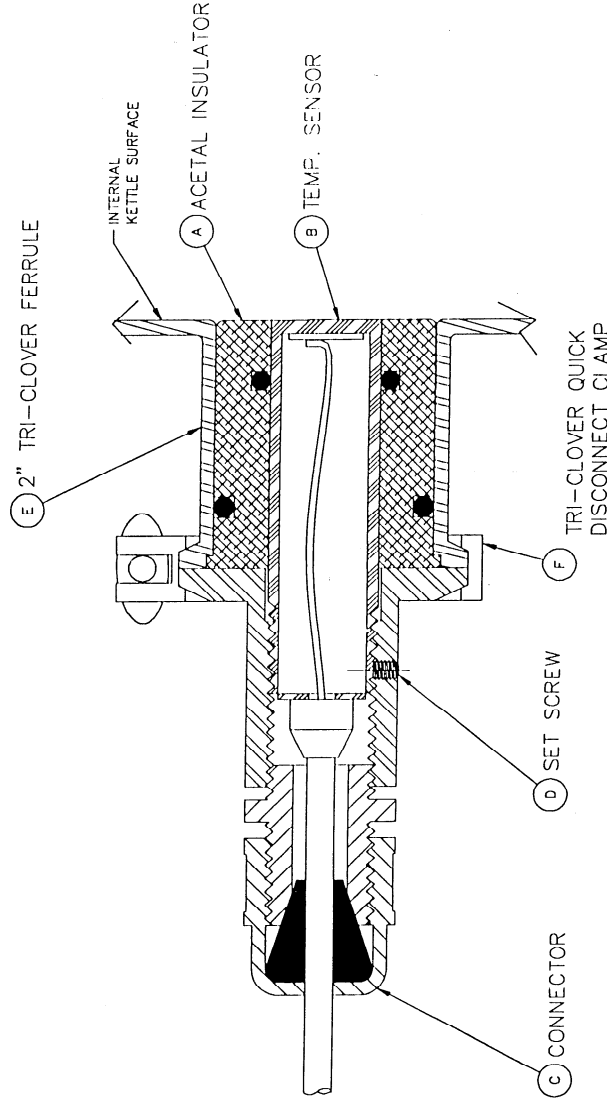


CORRECT ADJUSTMENT OF FLOOR FLANGE

<b>J.C.PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-3600 FAX (410) 391-8042	CHECKED BY:	DRAWN BY: JAY S. DATE: 4-27-96 SCALE: NONE	SIZE: B REV.	DRAWING NUMBER: 8576 SHEET: 1 of 1
	2" TO 2 1/2" FLOOR FLANGE ADJUSTMENT INSTRUCTIONS This drawing and all information contained therein is the property of J.C.Pardo & Sons, Inc. No part of this drawing and all information is to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of J.C.Pardo & Sons, Inc. It is located subject to return upon demand and is not to be used directly or indirectly in any way detrimental to J.C.Pardo & Sons.			

## INSTALLATION INSTRUCTIONS

1. INSERT PART "A" INTO KETTLE FERRULE PART "E" SO PART "A" IS FLUSH WITH INTERNAL KETTLE SURFACE  $\pm .000$  TO AVOID SCRAPER BLADE FROM INTERFERING WITH TEMPERATURE PROBE.
2. INSERT PART "B" ASSEMBLY INTO PART "A" AND ADJUST UNTIL SURFACE OF PART IS FLUSH WITH INTERNAL KETTLE SURFACE, SO THAT THE SCRAPER BLADE WILL WIPE THE SURFACE CLEAN. THIS MUST OCCUR TO OBTAIN AN ACCURATE TEMPERATURE READING FROM THE PROBE. FOR EASIER ADJUSTMENT OF PROBE, INSTALL O-RINGS AFTER ALL ADJUSTMENTS HAVE BEEN MADE.
3. AFTER STEPS 1 AND 2, INSTALL CLAMP "F" AND CHECK INTERNAL SURFACE WITH PROBE TO FIT THE ABOVE REQUIREMENTS. ADJUST, IF REQUIRED.
4. TIGHTEN BOTH SET SCREWS "D".
5. TIGHTEN CONNECTOR "C".
6. RUN WIRE TO JUNCTION BOX AND ATTACH TO BOX.
7. TEST TEMPERATURE PROBE TO SEE IF TEMPERATURE READING IS ACCURATE.



### NOTE:

USE CHESTERTON 622, USDA APPROVED OR EQUIVALENT ON O-RINGS BEFORE INSTALLATION.

JOB #

QTY:

THIS DRAWING AND ALL INFORMATION CONTAINED THEREIN IS THE PROPERTY OF J. C. PARDO & SONS INC. BALTO. MD. 21220	
SCALE: NONE	DATE: 4/27/95
DESIGNED BY: JCS	DRAWN BY: LAURIE YOR
TEMPERATURE SENSOR INSTALLATION	
SHEET 1 OF 1	

J.C. PARDO & SONS INC.  
1250 REAMES RD. BALTO. MD. 21220

SCALE: NONE DATE: 4/27/95

DESIGNED BY: JCS DRAWN BY: LAURIE YOR

TEMPERATURE SENSOR INSTALLATION

SHEET 1 OF 1



**Cleveland Range, LLC.**

1333 East 179<sup>th</sup> Street

Cleveland, OH 44110

Phone: (216) 481-4900

Fax: (216) 481-3782

<http://www.clevelandrange.com>

## MIXER KETTLES

### Kettle Placement

- Level
- Centered on hoist rail
- All legs bolted to floor
- Gear box properly supported
- Proper clearance
- Pasta basket and batch bucket clearances
- Floor drains and poor paths

### Electrical Requirements

- Voltage
- Phase
- Amp draw
- Wire Size
- Check motor rotation

### Water requirements

#### 1. Hot and cold water supply (Potable)

- Line size
- Maximum water pressure
- Line strainers
- Pressure regulator
- Water quality

#### 2. Chilled Water

- Line sizes (in and out)
- Locate and inspect line strainer
- Check for leaks

### Steam Requirements

- Locate steam source
- Line sizes (in and out)
- Steam pressure
- Steam gauge
- Check safety valve operation
- Check for leaks

### Air Requirements

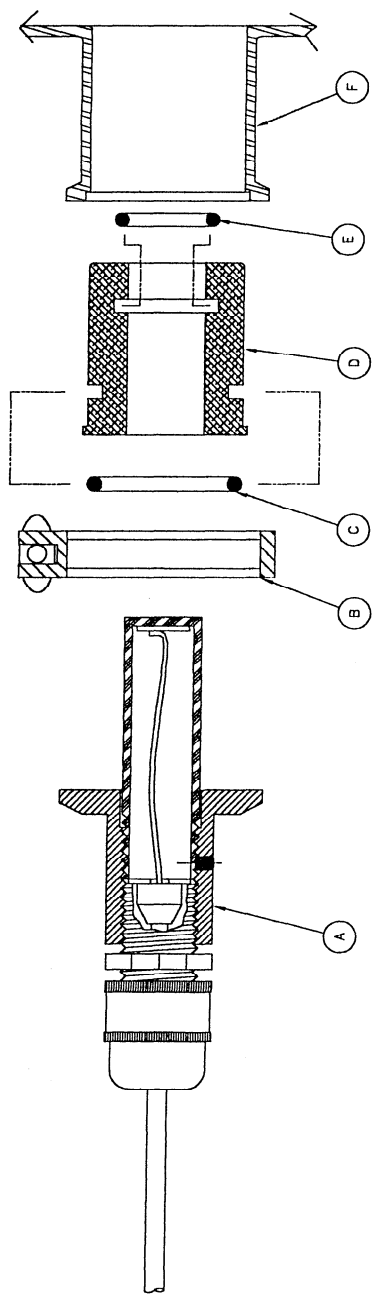
- Line size
- Pressures
- Check lubricator
- Check for leaks

Model no. \_\_\_\_\_

Serial no. \_\_\_\_\_

Comments:





**CLEANING INSTRUCTIONS**

1. BE SURE KETTLE IS EMPTY AND MAIN POWER IS DISCONNECTED.
2. REMOVE CLAMP "B" AND SLIDE TEMP. PROBE ASSEMBLY "A" OUT OF THE SEAL HOLDER "D". PLACE PROBE ASSEMBLY IN HOLDER ON KETTLE LEG.
3. SLIDE SEAL HOLDER "D", OUT OF THE FERRULE "F" AND REMOVE INNER AND OUTER O-RINGS "C" AND "E".
4. CLEAN ALL PARTS THOROUGHLY.

**REASSEMBLE INSTRUCTIONS**

1. LUBRICATE O-RINGS WITH CHESTERTON 522, USDA APPROVED OR EQUIVALENT BEFORE REASSEMBLING.
2. INSTALL LUBRICATED O-RINGS "C" & "E" INTO SEAL HOLDER "D".
3. INSTALL SEAL HOLDER "D" WITH O-RINGS "C" & "E" INTO FERRULE "F".
4. SLIDE TEMP. PROBE ASSEMBLY "A" INTO SEAL HOLDER "D".
5. REPLACE CLAMP "B".

**WARNINGS**

1. FAILURE TO PLACE PROBE ASSEMBLY IN HOLDER COULD RESULT IN DAMAGE.
2. DO NOT USE CAUSTIC SODA ON PARTS "C", "D", OR "E" AS THIS WILL RESULT IN DAMAGE.

KETTLE LEG

TEMP SENSOR HOLDER

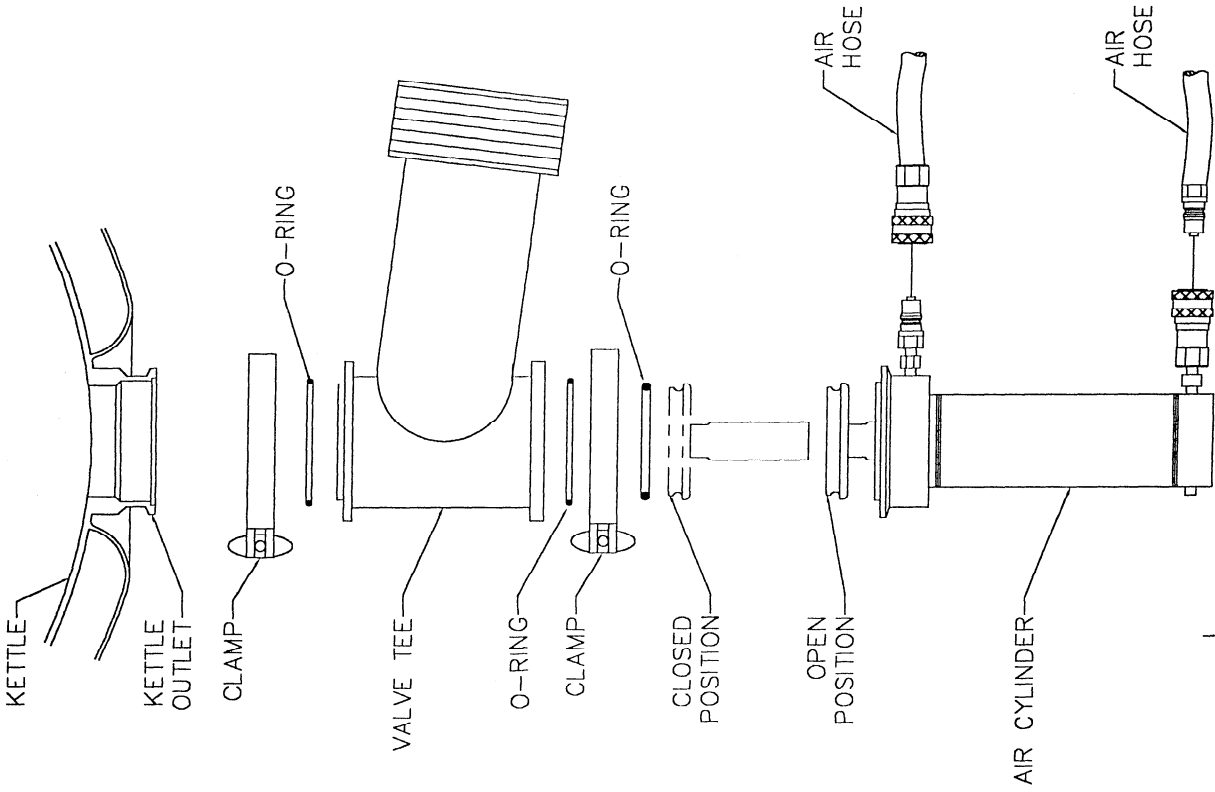
B	ADDED LINE NOTE 2	TJK	6/10/96
A	REDRAWN FROM HAND AND ADDED NOTES.	LY	4/27/95
REV	DESCRIPTION	BY	DATE
REVISIONS			

**J.C.PARDO & SONS INC.**  
 1250 REAMES RD. BALTO MD. 21220  
 PHONE (410) 391-5800 FAX (410) 391-9042

DATE IN L.Y. DATE 4/27/95  
 DRAWN BY NONE

TEMPERATURE SENSOR CLEANING INSTRUCTIONS  
THIS DRAWING IS THE PROPERTY OF J.C. PARDO & SONS INC. IT IS TO BE USED FOR THE MANUFACTURE OF THE PRODUCT DESCRIBED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

SIZE C  
 SHEET 8322  
 REV B  
 1 of 1

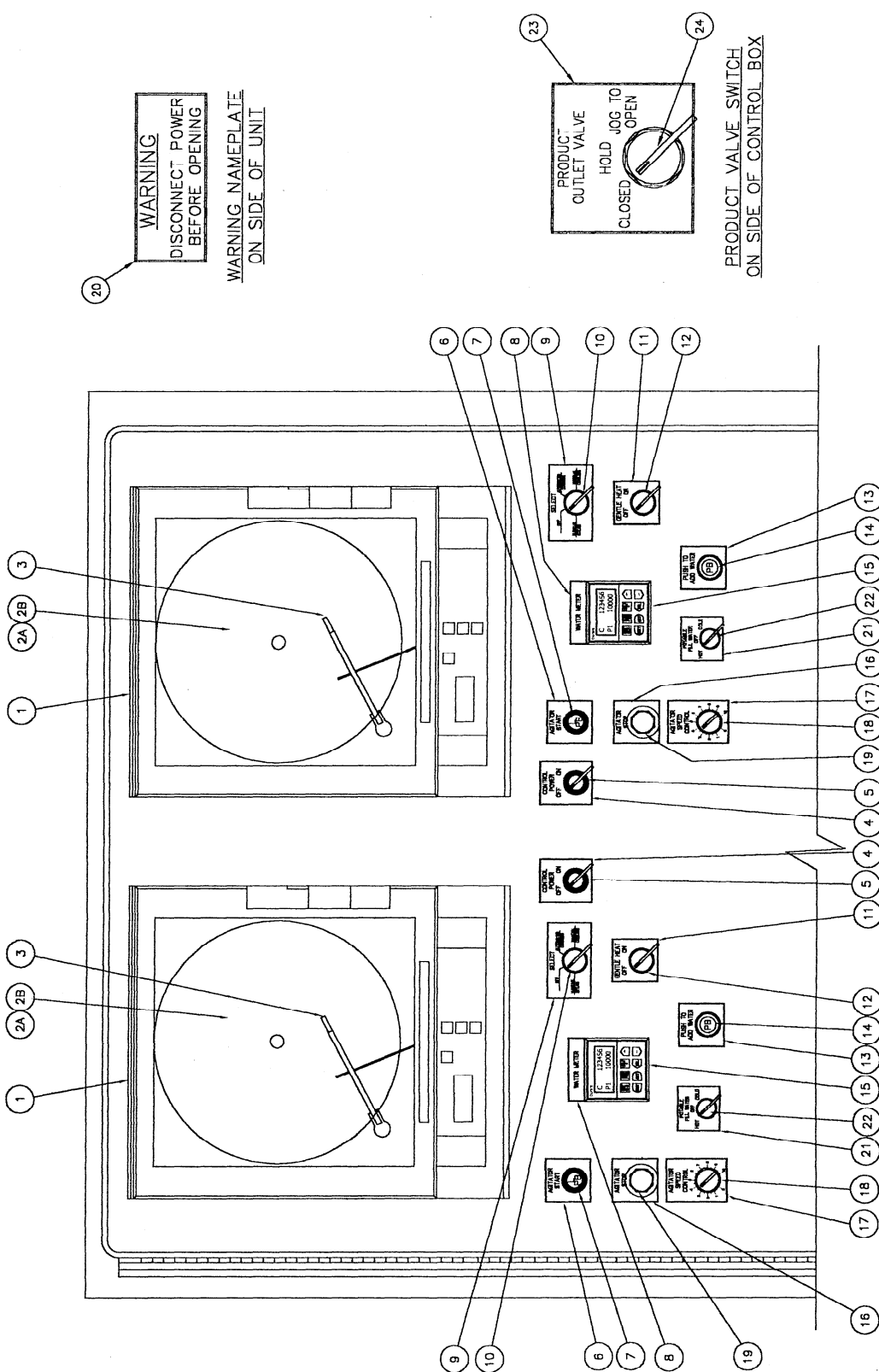


**J.C.PARDO INSTALLATION & CLEANING INSTRUCTION FOR PRODUCT VALVE**

- 1.) OPEN PRODUCT VALVE.
- 2.) DISCONNECT AIR HOSES.
- 3.) REMOVE AIR CYLINDER.
- 4.) REMOVE VALVE TEE.
- 5.) REMOVE ALL O-RINGS.
- 6.) CLEAN AIR CYLINDER, DO NOT SUBMERGE IN WATER. WIPE CLEAN AND SANITIZE.
- 7.) CLEAN AND SANITIZE TEE AND O-RINGS.
- 8.) GREASE AND REINSTALL O-RINGS.
- 9.) REINSTALL TEE TO KETTLE OUTLET.
- 10.) REINSTALL AIR CYLINDER TO BOTTOM OF TEE.
- 11.) RECONNECT AIR HOSES.
- 12.) O.K. TO CLOSE VALVE AND CHECK FOR ALIGNMENT.

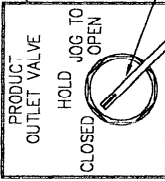
<b>J.C.PARDO &amp; SONS INC.</b> 1250 TRAVELER RD. BALTO MD. 21280 PHONE (410) 591-3000 FAX (410) 591-3500		DRAFTED BY: SEE DATE: 01/09/01 DRAWN BY: MORE	3" J.C.PARDO PRODUCT VALVE CLEANING INSTRUCTION	REV: D DATE: 9027 1 of 1
--	--	---	--	--------------------------------

REV.	DESCRIPTION	BY	DATE
	REVISIONS		



**WARNING**  
DISCONNECT POWER  
BEFORE OPENING

WARNING NAMEPLATE  
ON SIDE OF UNIT



PRODUCT VALVE SWITCH  
ON SIDE OF CONTROL BOX

REV.	DESCRIPTION	BY	DATE	<b>J.C. PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 581-3800 FAX (410) 581-9042		DESIGNED BY DATE: 3/12/02 APPROVED BY SIGNATURE	DUAL KETTLE FLOOR MNTD. CONTROL PANEL REPLACEMENT PARTS (WHOLE FOODS ONLY)	DRAWING NUMBER 11648
	REVISIONS							REV. C 1 of 2

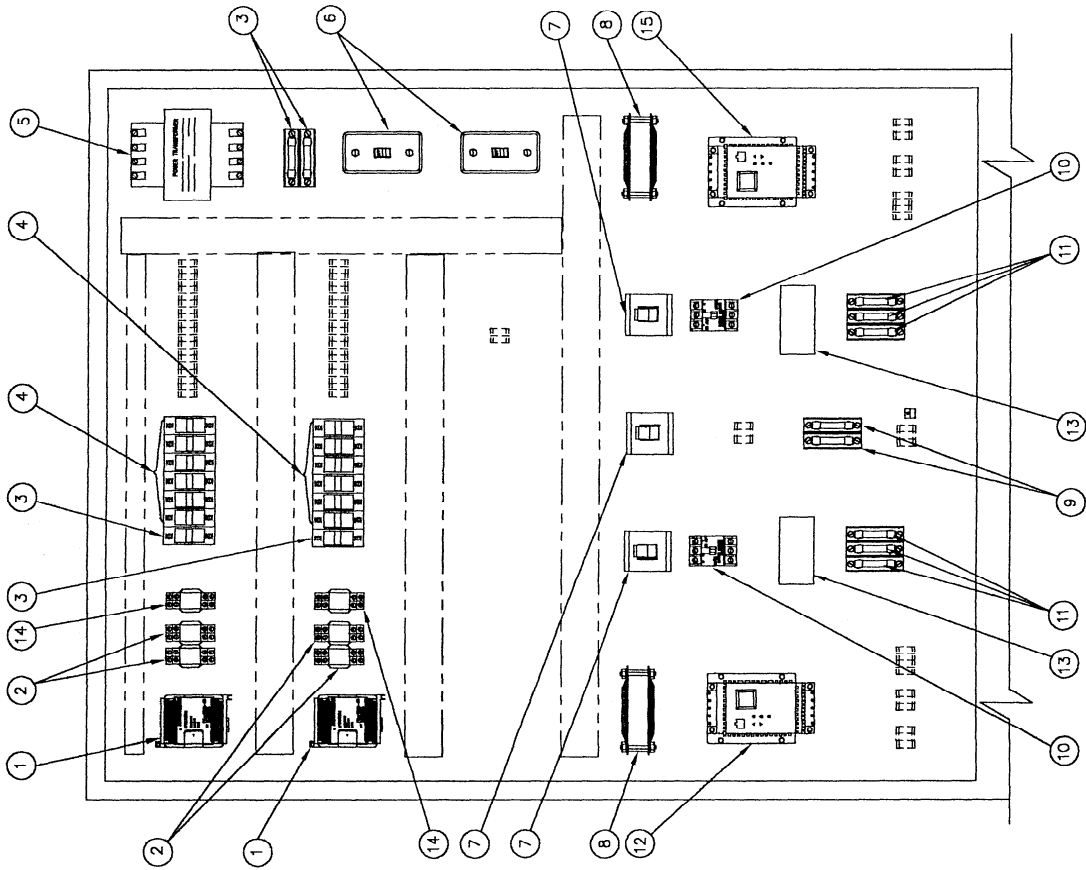
REPLACEMENT PARTS		
ITEM	PART NO.	DESCRIPTION
1	EL8C0-3000042	PARTLOW 8000
-	EL977-7700019	REPLACEMENT PEN MOTOR ITEM #1
-	EL977-7700018	REPLACEMENT CHART MOTOR ITEM #1
-	EL977-7700020	REPLACEMENT TOUCH PAD COVER
-	ELP00-3000037	REPLACEMENT DOOR FOR ITEM #1
-	ELP00-3000036	REPLACEMENT DOOR WINDOW ITEM #1
2A	MSJ00-0000005	24 HOUR CHART PAPER F
2B	MSJ00-0000006	24 HOUR CHART PAPER C
3	MSP00-0000002	RED REPLACEMENT PEN
4	NPYELLOW00110	NAMEPLATE
5	2EP00-8800025	RED LIGHTED TURN SWITCH
-	ELV00-6000001	REPLACEMENT BULB FOR ITEM #5
6	NPYELLOW00103	NAMEPLATE
7	2EP00-8800047	GREEN LIGHTED PUSH BUTTON
-	ELV00-1200001	REPLACEMENT BULB FOR ITEM #7
8	NPYELLOW00116	NAMEPLATE
9	NPYELLOW00111	NAMEPLATE
10	ELP00-8800001	FOUR POSITION SWITCH
11	NPYELLOW00107	NAMEPLATE
12	2EP00-8800006	TWO POSITION SWITCH
13	NPYELLOW00106	NAMEPLATE
14	2EP00-8800007	BLACK PUSH BUTTON
15	EL8C0-0000066	DIGITAL DURANT WATER COUNTER
-	ELV02-5000019	REPLACEMENT .315A FUSE ITEM #15
16	NPYELLOW00104	NAMEPLATE
17	NPYELLOW00115	NAMEPLATE
18	ELP00-8800003	SPEED POT
19	2EP00-8800019	RED MUSHROOM PUSH BUTTON
20	NPRED00000019	NAMEPLATE WARNING
21	NPYELLOW00109	NAMEPLATE
22	2EP00-8800022	THREE POSITION SWITCH
23	NPYELLOW00241	NAMEPLATE
24	2EP00-8800044	THREE POSITION SWITCH

REV.	DESCRIPTION	BY	DATE	REVISIONS
<b>J.C.PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO MD. 21280 PHONE (410) 981-9800 FAX (410) 981-9048				ORDER BY APPROVED BY
ORDER IN DATE 3/12/02 REASON NONE				DUAL KETTLE FLOOR MNTD. CONTROL PANEL REPLACEMENT PARTS (WHOLE FOODS ONLY)
ORDER NO. JCS DATE 3/12/02 REASON NONE				ORDER NO. 11648 REV. 2 of 2

PLEASE RETURN ALL PARTS TO THE ORIGINAL SUPPLIER OR TO THE FOLLOWING ADDRESS: J.C. PARDO & SONS, INC., 1250 REAMES RD., BALTO, MD. 21280. RETURNED PARTS WILL BE DESTROYED. THE CUSTOMER IS RESPONSIBLE FOR THE COST OF RETURN SHIPPING.

UNIVERSAL REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	ELBCO-0000046	PROGRAMMABLE CONTROLLER
2	ELPSW-0000002	RELAY, 120V
3	ELPSW-0000003	REPLACEMENT BASE FOR ITEM #2
4	ELV02-5000001	5 AMP FUSE
4	ELV02-5000002	1 AMP FUSE
5	ELV10-0000001	TRANSFORMER - 208/380V SYSTEM
6	ELPSW-0000007	LOW VOLTAGE DISCONNECT
7	ELPSW-0000001	HIGH VOLTAGE DISCONNECT
8	2EP00-0000001	FAN WITH SHROUDS
9	ELV06-0000002	8 AMP FUSE
10	ELPSW-0000004	MOTOR CONTACTOR
11	ELV06-0000007	20 AMP FUSE
12	ELH02-0000008	2 HP INVERTER
13	ELV00-0000024	LINE REACTOR 2-3HP
14	ELPSW-0000021	RELAY, 24V
-	ELPSW-0000003	REPLACEMENT BASE FOR ITEM #14
15	ELH03-0000010	3 HP INVERTER



**J.C.PARDO & SONS INC.**  
 BALTO MD, 21220  
 PHONE (410) 891-8800  
 FAX (410) 891-8043

INTERNAL DUAL CONTROL PANEL 208V  
 INCLINED KETTLE W/TILT AGIT. (WHOLE FOODS)  
 C  
 11649  
 1 of 1

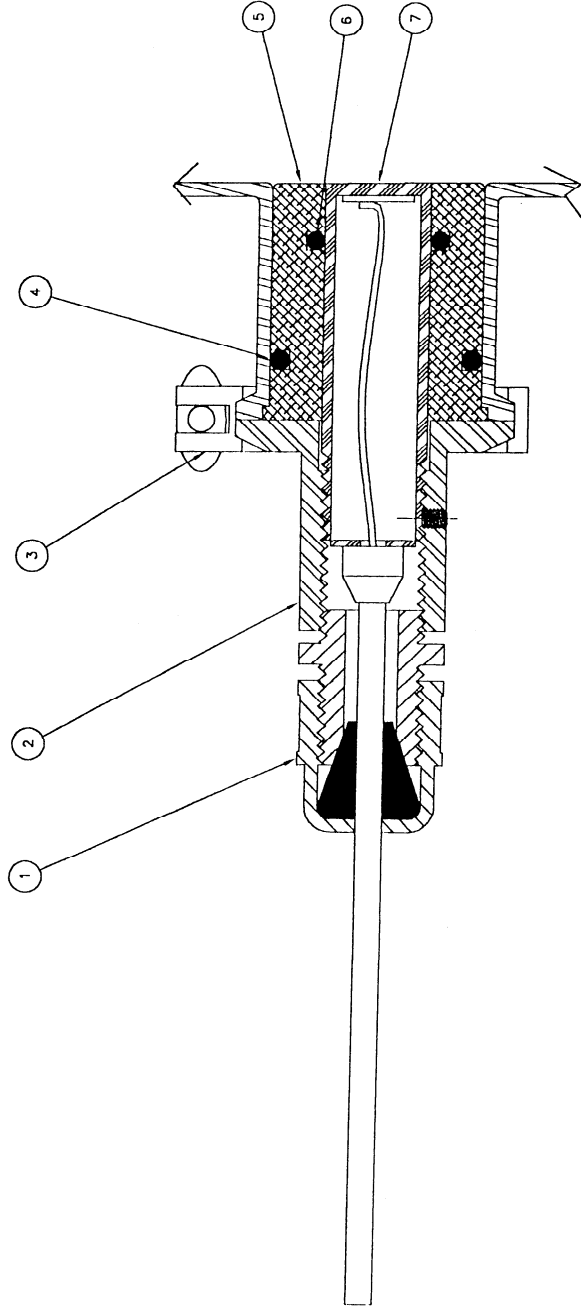
DESIGNED BY: [Blank]  
 APPROVED BY: [Blank]  
 DRAWN BY: JBS  
 DATE: 3/12/02  
 REASON: NONE

REV.	DESCRIPTION	BY	DATE
	REVISIONS		

THIS DRAWING AND ALL INFORMATION CONTAINED THEREIN IS THE PROPERTY OF J.C. PARDO & SONS INC. IT IS TO BE KEPT IN CONFIDENTIALITY AND NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF J.C. PARDO & SONS INC.

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	ELC00-0000011	WIRE RESTRAINT
2	TSSENSOR00001	CAP ASSEMBLY
3	DF502-0000002	2" TRI CLAMP
4	SE3DRING00004	OUTER O-RING
5	SRSENSOR00001	SEAL RETAINER
6	SE3DRING00005	INNER O-RING
7	TSSENSOR00002	TEMPERATURE SENSOR



JOB # \_\_\_\_\_ QTY: \_\_\_\_\_

**J.C.PARDO & SONS INC.**  
 1250 REAMES RD. BALTO. MD. 21220

DATE 9-15-94  
 DRAWN BY T.M. KAHL  
 CHECKED BY \_\_\_\_\_

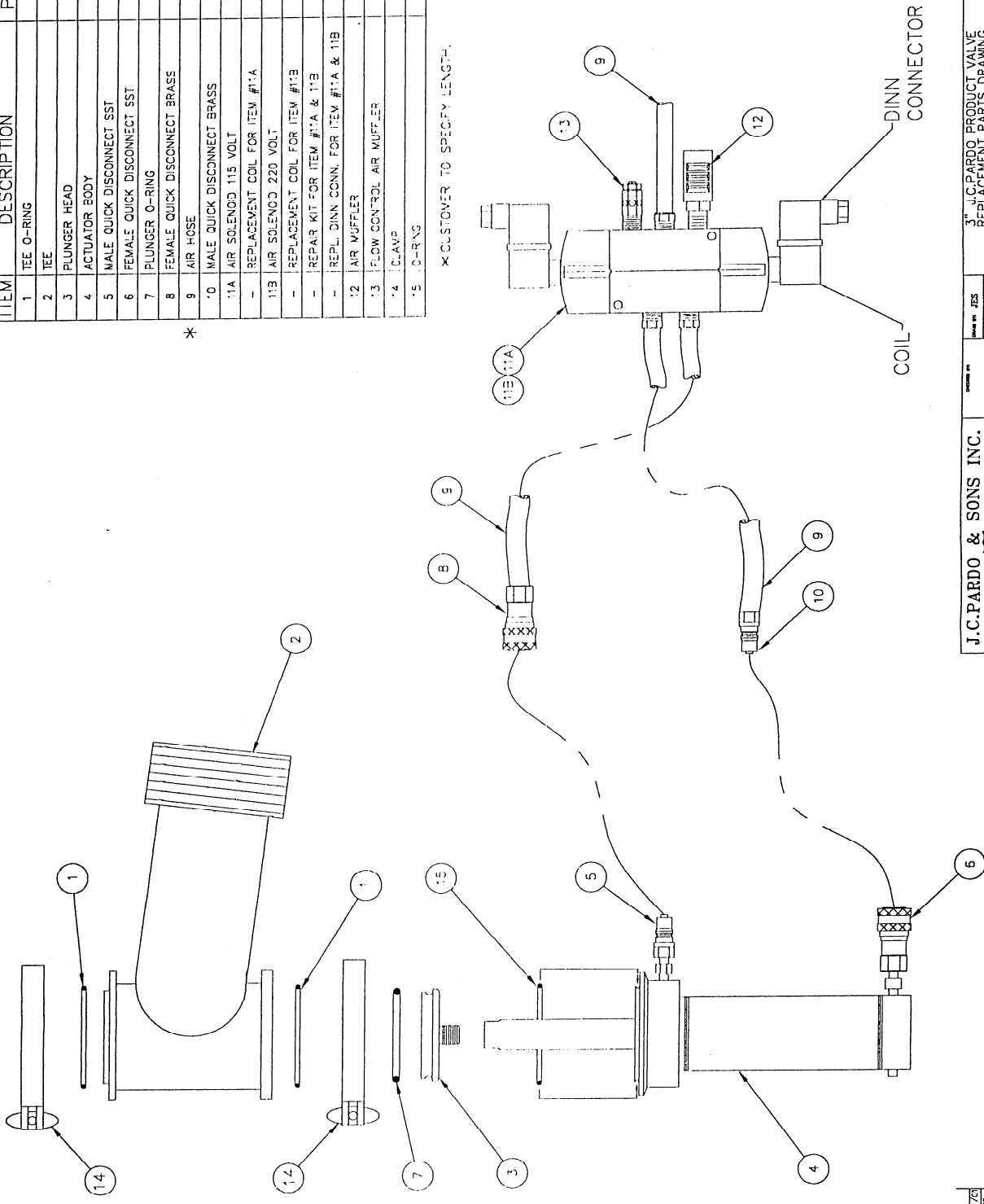
REPLACEMENT PARTS, RTD TEMP. SENSOR

SHEET 1 OF 1 C 11039

REPLACEMENT PARTS

ITEM	DESCRIPTION	PART NUMBER
1	TEE O-RING	SE3ORING00011
2	TEE	1FS03-0000006
3	PLUNGER HEAD	1FS02-7500014
4	ACTUATOR BODY	ARS03-0000001
5	MALE QUICK DISCONNECT SST	ARS00-1200002
6	FEMALE QUICK DISCONNECT SST	ARS00-1200003
7	PLUNGER O-RING	SE3ORING00012
8	FEMALE QUICK DISCONNECT BRASS	1HB00-1200002
9	AIR HOSE	AR700-2500002
10	MALE QUICK DISCONNECT BRASS	1HB00-1200001
11A	AIR SOLENOID 115 VOLT	AR800-2500013
-	REPLACEMENT COIL FOR ITEM #11A	SP988-BB00027
11B	AIR SOLENOID 220 VOLT	AR800-2500014
-	REPLACEMENT COIL FOR ITEM #11B	SP988-9900028
-	REPAIR KIT FOR ITEM #11A & 11B	SP998-9900074
-	REPL. DINN CONN. FOR ITEM #11A & 11B	ELP0C-0000032
12	AIR MUFFLER	ARP00-2500001
13	FLOW CONTROL AIR MUFFLER	AR500-2500028
14	CLAMP	DFSC3-0000001
15	O-RING	SE3ORING00042

\* X CUSTOMER TO SPECIFY LENGTH.



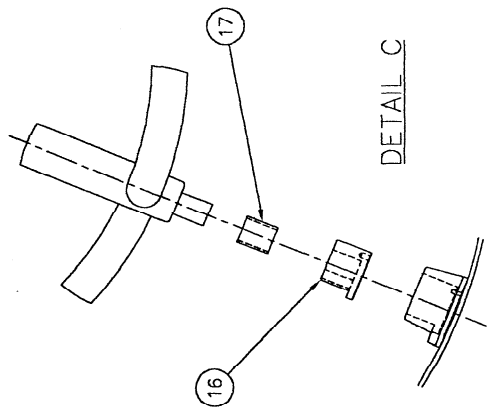
REV.	ADDED PARTS	DATE
1	155 11/28/01	1971 DATE
REVISIONS		

**J.C. PARDO & SONS INC.**  
 1250 REMADES RD. BALTO MD. 21220  
 PHONE (410) 381-8300 FAX (410) 381-8300

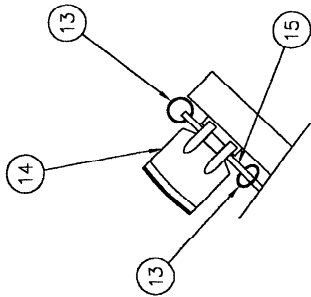
DESIGNED BY JES  
 DATE 12/5/00  
 DRAWING NO. NONE

3" J.C. PARDO PRODUCT VALVE  
 REPLACEMENT PARTS DRAWING  
 THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF J.C. PARDO & SONS INC. AND IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN.

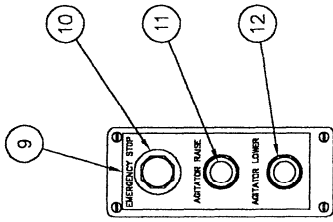
DWG NO. 11549  
 SHEET A  
 1 OF 1



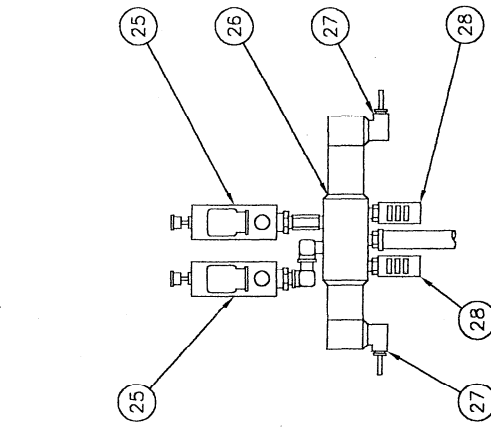
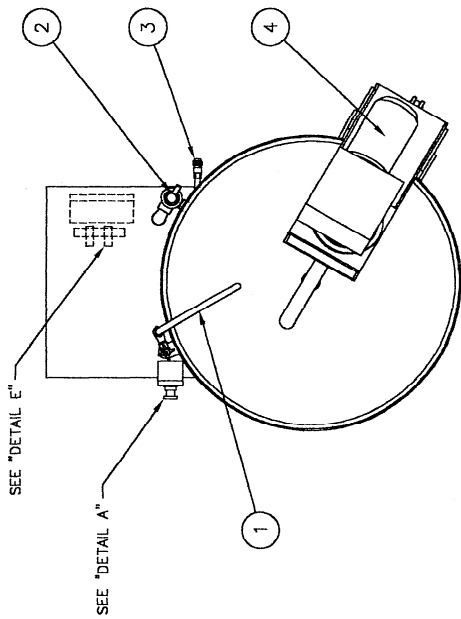
DETAIL C



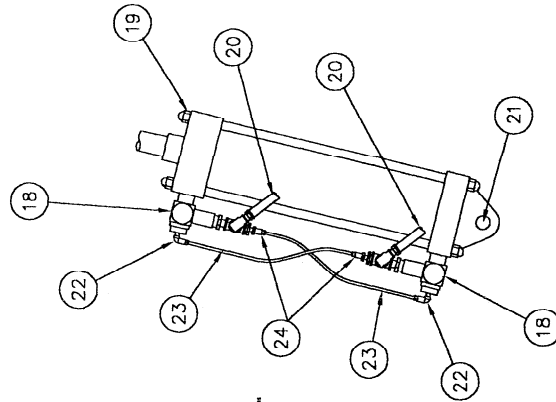
DETAIL B



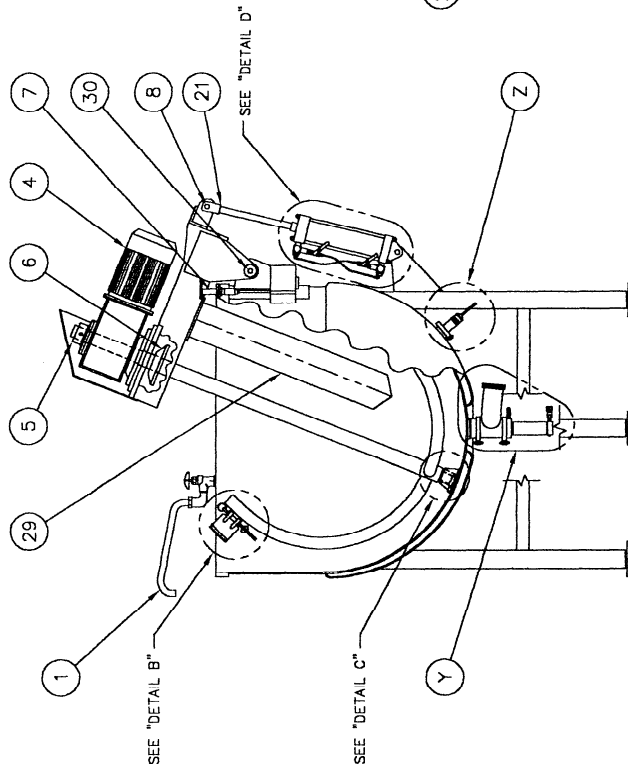
DETAIL A



DETAIL E



DETAIL D



<b>J.C. PARDO &amp; SONS INC.</b> 1880 REAMES RD. BALTO. MD. 21280 PHONE (410) 581-3800 FAX (410) 581-3800		DRAWING NO. IA-MKOL-200-CC W/ TILT OUT AGITATOR PART NO. 11652 DATE 3/21/02 DRAWN BY NONE CHECKED BY NONE	SHEET NO. D OF 2
--	--	---	---------------------

REV.	DESCRIPTION	BY	DATE
REVISIONS			



REPLACEMENT PARTS LIST		
ITEM	PART NO.	DESCRIPTION
1	PBB00-7500018	FILL FAUCET WITH SWING SPOUT
2	VAB01-2500001	100 PSI SAFETY VALVE
3	ARB00-5000001	AIR QUICK DISCONNECT
4	DUH03-0000017	3 HP DRIVE UNIT
-	DU903-0000012	REPLACEMENT MOTOR FOR ITEM #4
-	DU902-0000032	REPLACEMENT GEAR BOX FOR ITEM #4
5	MSS02-0000001	SET COLLAR
6	1FW05-2500001	DRIP SHIELD
7	2EB00-0000001	MOTOR KILL PROX. SWITCH & CORDSET
-	EL8SW-0000013	REPLACEMENT PROX. SWITCH
-	ELP00-0000043	RELACEMENT CORDSET
8	HWS01-0000003	TOP/BOTTOM PIN WITH SNAP RINGS
9	NPYELLOW00256	NAMEPLATE
10	2EP01-25A0014	RED MUSHROOM PUSH BUTTON
11	2EP01-25A0001	YELLOW PUSH BUTTON
12	2EP01-25A0002	BLUE PUSH BUTTON
13	HWS00-0000022	RETAINING RING
14	MSX00-0000007	SCRAPER BLADE
15	RF000-0000001	RETAINING ROD
16	1FK02-7500003	IDLER BEARING
-	TOS00-0000001	BEARING REMOVAL TOOL FOR ITEM #16

REPLACEMENT PARTS LIST		
ITEM	PART NO.	DESCRIPTION
17	FAS01-5000001	IDLER SLEEVE
18	ARB00-5000004	AIR PILOTTED CHECK VALVE
19	ARB00-0000006	AIR CYLINDER
20	AR700-2500002	AIR HOSE
21	HYC00-0000013	YOKE
22	ARB00-2500031	90° AIR FITTING
23	ARF00-2500003	AIR TUBING
24	ARB00-2500034	STRAIGHT AIR FITTING
25	ARB00-3700006	AIR REGULATED CHECK VALVE
26	AR800-2500017	AIR SILENCER
-	SP989-9900083	REPAIR KIT FOR ITEM #26
-	SP988-8800033	REPLACEMENT COIL FOR ITEM #26
27	ELP00-0000044	DINN CONNECTOR
28	ARF00-2500001	AIR MUFFLER
29	1FS00-0000047	REMOVABLE BREAKER BAR
30	BCZ01-0000005	BRONZE BUSHING
DRAWINGS LIST		
ITEM	DRAWING NO.	DESCRIPTION
Y	C-11549	PRODUCT VALVE
Z	C-11039	TEMPERATURE SENSOR ASSEMBLY

\* CUSTOMER TO SPECIFY LENGTH

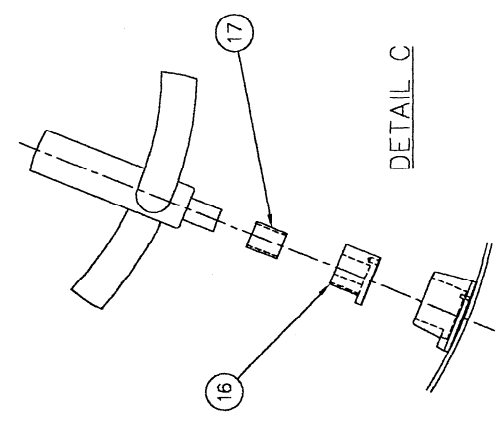
REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.  
 1800 REARERS RD. BALITO MD. 21220  
 PHONE (410) 561-5666 FAX (410) 561-8600

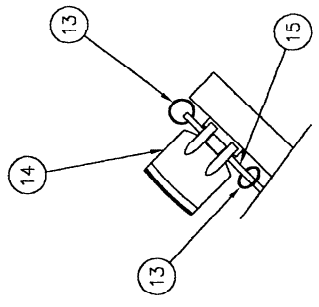
DATE OF ISS 3/21/02  
 NAME NONE

IA-MKDL-200-CC-W/ TILT OUT AGITATOR  
 REPLACEMENT PARTS

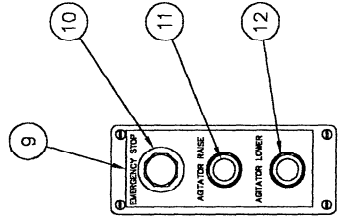
11852  
 1 of 2



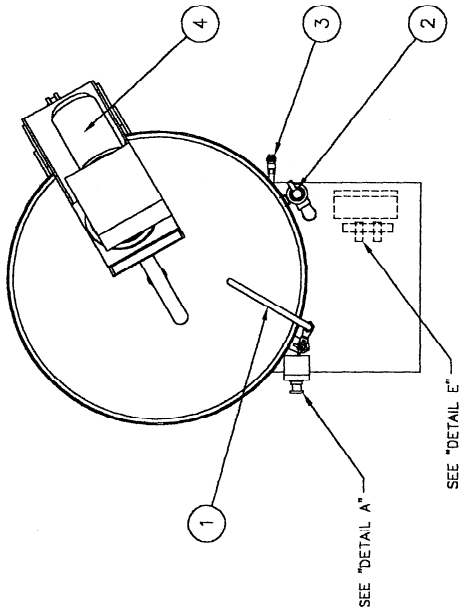
DETAIL C



DETAIL B

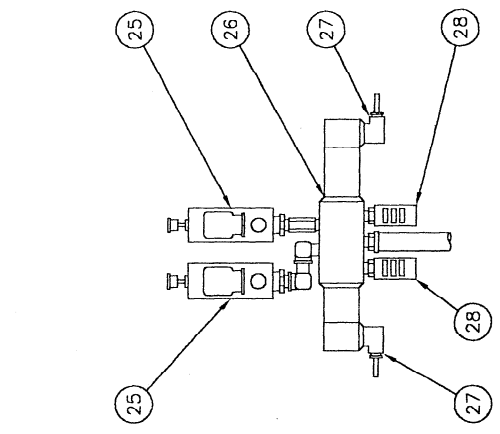


DETAIL A

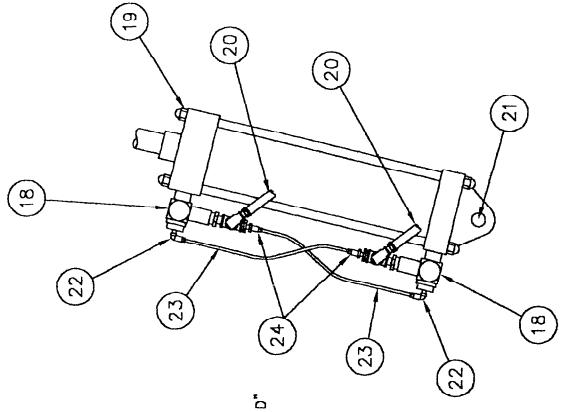


SEE "DETAIL A"

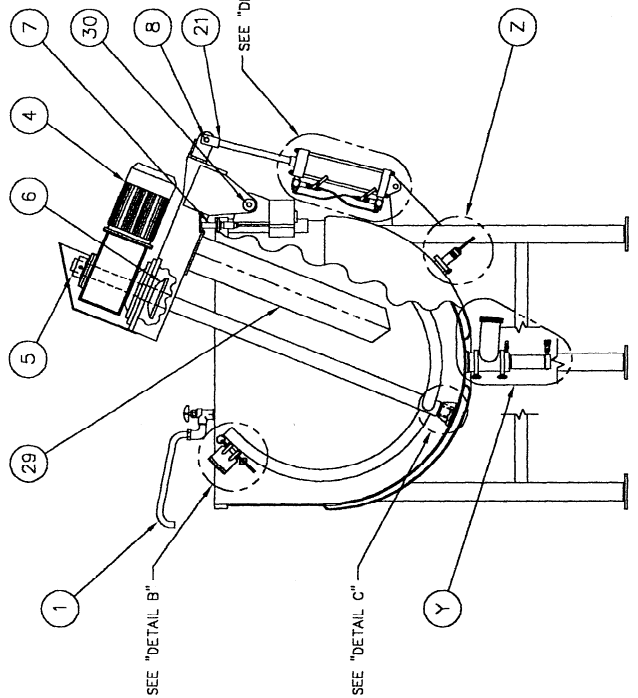
SEE "DETAIL E"



DETAIL E



DETAIL D



SEE "DETAIL B"

SEE "DETAIL C"

REV	DESCRIPTION	BY	DATE	REVISIONS
<b>J.C. PARDO &amp; SONS INC.</b> 1260 BELLEVUE RD. BAYVIEW RD. 21280 PHOENIX (602) 948-0800 FAX (602) 948-0800				DRAWING NO. J25 DATE 3/21/02 DRAWN BY NONE
IA-MKDL-100-CC-W/ TILT-OUT AGITATOR REPLACEMENT PARTS				PART NO. 11653 QTY 1 OF 2

ITEM	PART NO.	DESCRIPTION
1	PBB00-750001B	FILL FAUCET WITH SWING SPOUT
2	VAB01-0000007	100 PSI SAFETY VALVE
3	ARB00-5000001	AIR QUICK DISCONNECT
4	DUH02-0000023	2 HP DRIVE UNIT
-	DU902-0000033	REPLACEMENT MOTOR FOR ITEM #4
-	DUB01-5000012	REPLACEMENT GEAR BOX FOR ITEM #4
5	MSS01-5000001	SET COLLAR
6	1FW04-5000001	DRIP SHIELD
7	2E800-0000001	MOTOR KILL PROX. SWITCH & CORDSET
-	ELBSW-0000013	REPLACEMENT PROX. SWITCH
-	ELP00-0000043	REPLACEMENT CORDSET
8	HWS01-0000003	TOP/BOTTOM PIN WITH SNAP RINGS
9	NPYELLOW00256	NAMEPLATE
10	2EP01-25A0014	RED MUSHROOM PUSH BUTTON
11	2EP01-25A0001	YELLOW PUSH BUTTON
12	2EP01-25A0002	BLUE PUSH BUTTON
13	HWS00-0000022	RETAINING RING
14	MSX00-0000007	SCRAPER BLADE
15	RFP00-0000001	RETAINING ROD
16	1-K02-7500003	IDLER BEARING
-	TOS00-0000001	BEARING REMOVAL TOOL FOR ITEM #16

ITEM	PART NO.	DESCRIPTION
17	FAS01-5000001	IDLER SLEEVE
18	ARB00-5000004	AIR PILOTTED CHECK VALVE
19	ARB00-0000006	AIR CYLINDER
20	AR700-2500002	AIR HOSE
21	HYC00-0000013	YOKE
22	ARB00-25000031	90° AIR FITTING
23	ARP00-2500003	AIR TUBING
24	ARB00-25000034	STRAIGHT AIR FITTING
25	ARB00-3700006	AIR REGULATED CHECK VALVE
26	ARB00-25000017	AIR SILENTOID
-	SP999-9900083	REPAIR KIT FOR ITEM #26
-	SP988-8800033	REPLACEMENT COIL FOR ITEM #26
27	ELP00-0000044	CINN CONNECTOR
28	ARP00-2500001	AIR MUFFLER
29	1FS00-0000046	REMOVABLE BREAKER BAR
30	B6Z01-0000005	BRONZE BUSHING

DRAWINGS LIST

ITEM	DRAWING NO.	DESCRIPTION
Y	C-11549	PRODJCT VALVE
Z	C-11039	TEMPERATURE SENSOR ASSEMBLY

\* CUSTOMER TO SPECIFY LENGTH

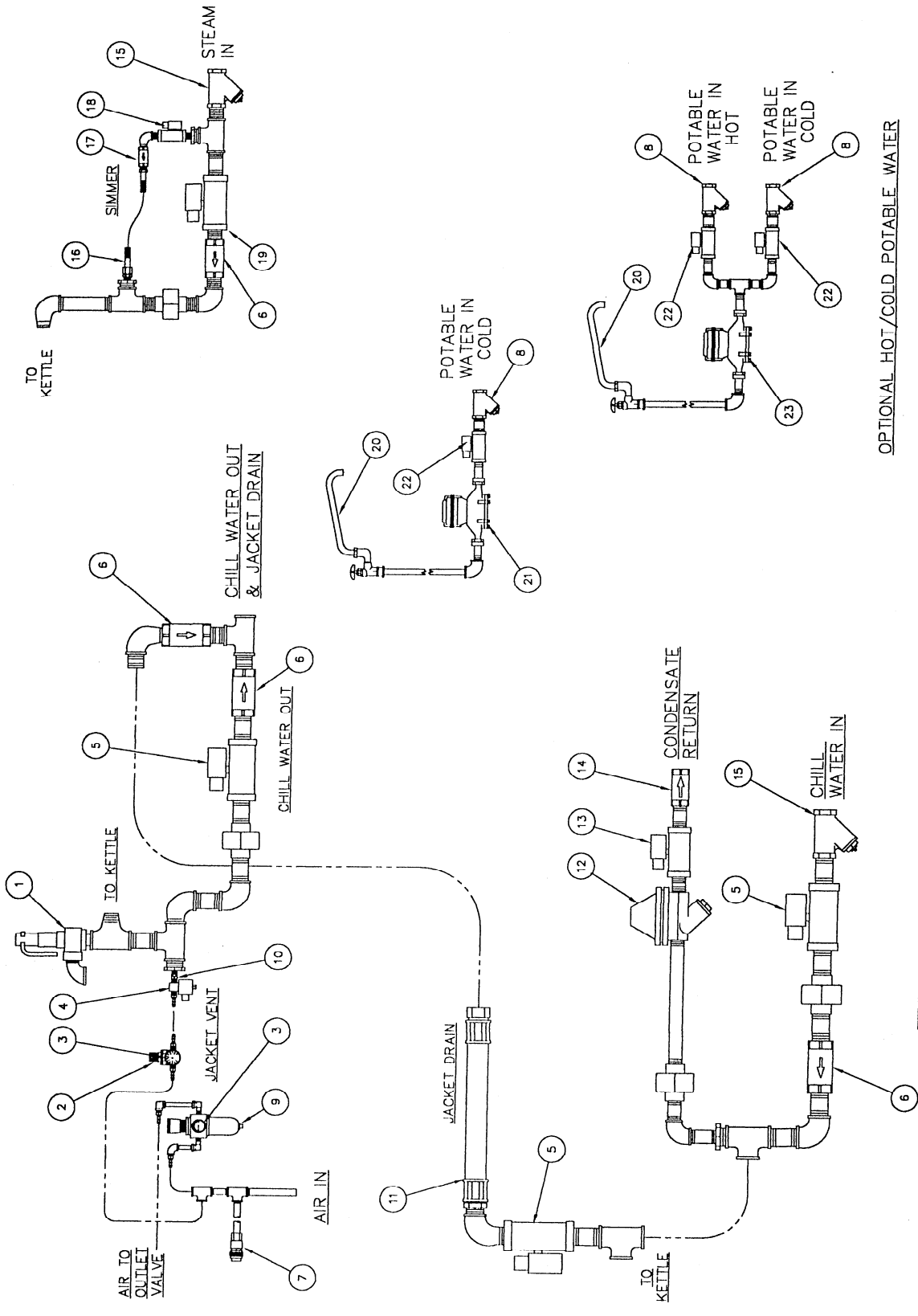
REV.	DESCRIPTION	BY	DATE
	REVISIONS		

**J.C.PARDO & SONS INC.**  
 1260 REAMES RD. BALTO MD. 21220  
 PHONE (410) 381-3600 FAX (410) 381-3600

ORDER NO. \_\_\_\_\_  
 QUOTE NO. \_\_\_\_\_  
 DATE 3/21/02  
 ORDER NOVE

IA-MKDL-100-CC W/ TILT OUT AGITATOR  
 REPLACEMENT PARTS

11653  
 D  
 2 of 2



OPTIONAL HOT/COLD POTABLE WATER

REV.	DESCRIPTION	BY	DATE	REVISIONS
<p><b>J.C. PARDO &amp; SONS INC.</b>          1250 REAMES RD. BALTO MD. 21220          PHONE (410) 381-9600 FAX (410) 381-9648</p>				
DESIGNED BY	JES	DATE	3-29-01	ISSUED BY
APPROVED BY				
DRUM NO.				
HA-MKDL-100-CC PLUMBING W/DINN CONNECTORS REPLACEMENT PARTS	C	REV.	11610	REV. 1

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND IS THE PROPERTY OF J.C. PARDO & SONS INC. IT IS TO BE USED ONLY FOR THE PROJECT AND FOR THE SPECIFIC EQUIPMENT AND MATERIALS SPECIFIED THEREON. IT IS SUBJECT TO CHANGE WITHOUT NOTICE AND WITHOUT OBLIGATION.

ITEM	PART NO.	DESCRIPTION
1	VAB01-0000007	100 PSI SAFETY VALVE
2	ARB00-3700002	MINI AIR REGULATOR
3	ARB00-2500004	REPLACEMENT GAUGE
4	ELB00-2500013	JACKET VENT SOLENOID
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #4
-	SP999-9900064	REPLACEMENT KIT FOR ITEM #4
-	SP988-8800002	REPLACEMENT COIL FOR ITEM #4
5	ELB01-0000013	CHILL WATER IN/OUT & JACKET DRAIN SOL.
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #5
-	SP999-9900005	REPLACEMENT KIT FOR ITEM #5
-	SP988-8800002	REPLACEMENT COIL FOR ITEM #5
6	MSB01-0000003	BALL CONE CHECK VALVE
7	ARB00-5000001	AIR QUICK DISCONNECT
-	MSB00-7500006	50 MESH STRAINER
-	MSB00-7500006	REPLACEMENT SCREEN FOR ITEM #8
9	ARB00-2500015	AIR REGULATOR
10	VAB00-2500001	NO LEAK CHECK VALVE
11	PED01-0000001	JACKET DRAIN HOSE
12	MSC00-7500002	STEAM TRAP
-	SP999-9900017	REPAIR KIT FOR ITEM #12
13	ELB00-7500016	CONDENSATE SOLENOID
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #13
-	SP999-9900007	REPLACEMENT KIT FOR ITEM #13
-	SP988-8800003	REPLACEMENT COIL FOR ITEM #13

ITEM	PART NO.	DESCRIPTION
14	MSB00-7500004	BALL CONE CHECK VALVE
15	MSB01-0000001	50 MESH STRAINER
-	MSB01-0000004	REPLACEMENT SCREEN FOR ITEM #15
16	PBF00-5000001	SIMMER FLEX LINE
17	MSB00-5000005	BALL CONE CHECK VALVE
18	ELB00-5000016	SIMMER SOLENOID
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #18
-	SP999-9900006	REPLACEMENT KIT FOR ITEM #18
-	SP988-8800003	REPLACEMENT COIL FOR ITEM #18
19	ELB01-0000014	STEAM IN SOLENOID
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #19
-	SP999-9900008	REPLACEMENT KIT FOR ITEM #19
-	SP988-8800003	REPLACEMENT COIL FOR ITEM #19
20	PBB00-7500018	FILL FAUCET
21	ELB00-7500017	DIGITAL COLD WATER METER
22	ELB00-7500015	POTABLE WATER IN SOLENOID
-	ELP00-0000000	REPLACEMENT DINN CONN. FOR ITEM #22
-	SP999-9900004	REPLACEMENT KIT FOR SOLENOID #22
-	SP988-8800002	REPLACEMENT COIL FOR SOLENOID #22
23	ELB00-7500018	DIGITAL HOT WATER METER (OPTIONAL)

REPLACEMENT PARTS LIST

REPLACEMENT PARTS LIST

**J.C. PARDO & SONS INC.**  
 1250 REAMERS RD. BALTO MD. 21220  
 PHONE (410) 391-3600 FAX (410) 391-6042

REV.	DESCRIPTION	BY	DATE
	REVISIONS		

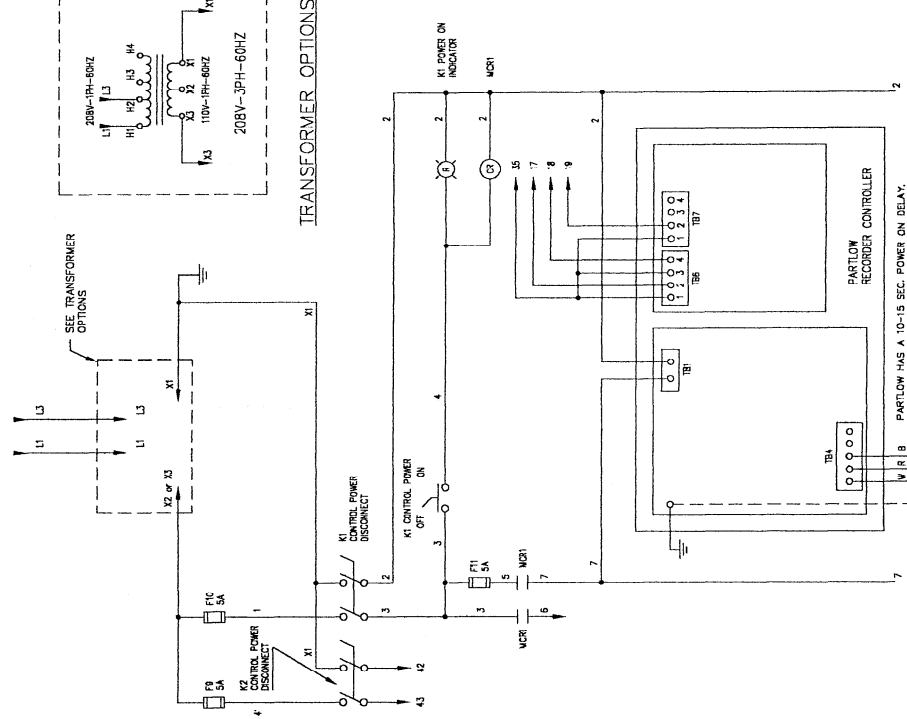
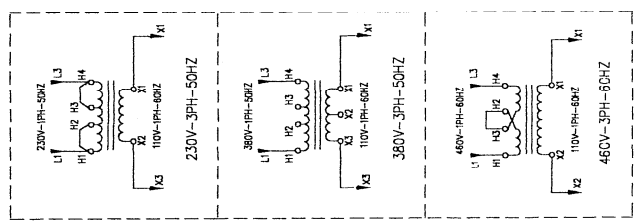
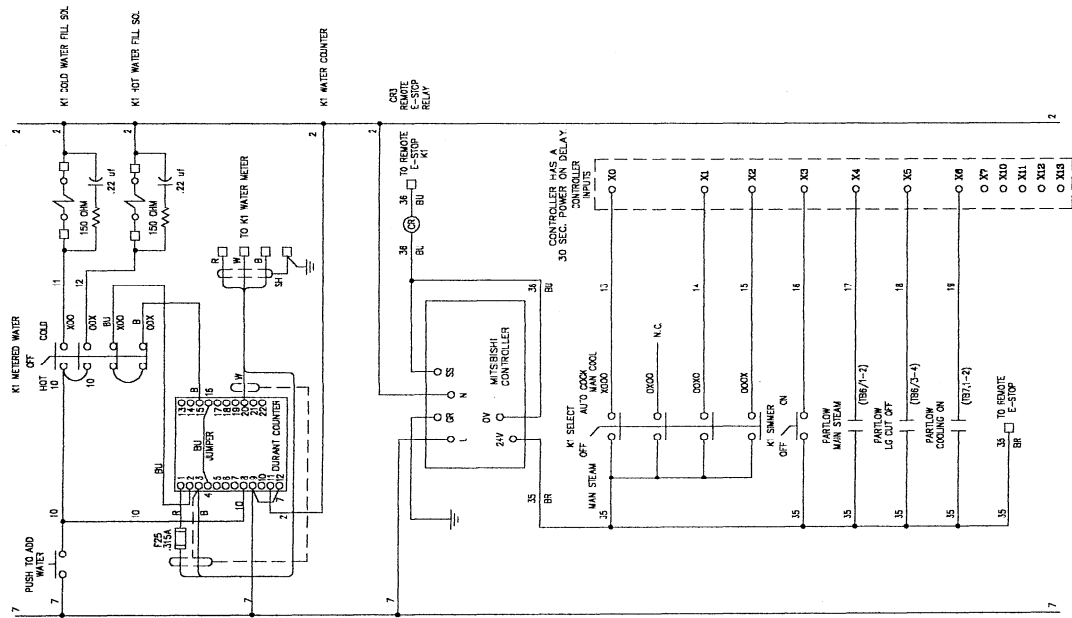
DESIGNED BY: JES  
 DATE: 3-29-01  
 APPROVED BY: NONE

HA-MKDL-100-CC PLUMBING W/DINN CONNECTORS REPLACEMENT PARTS

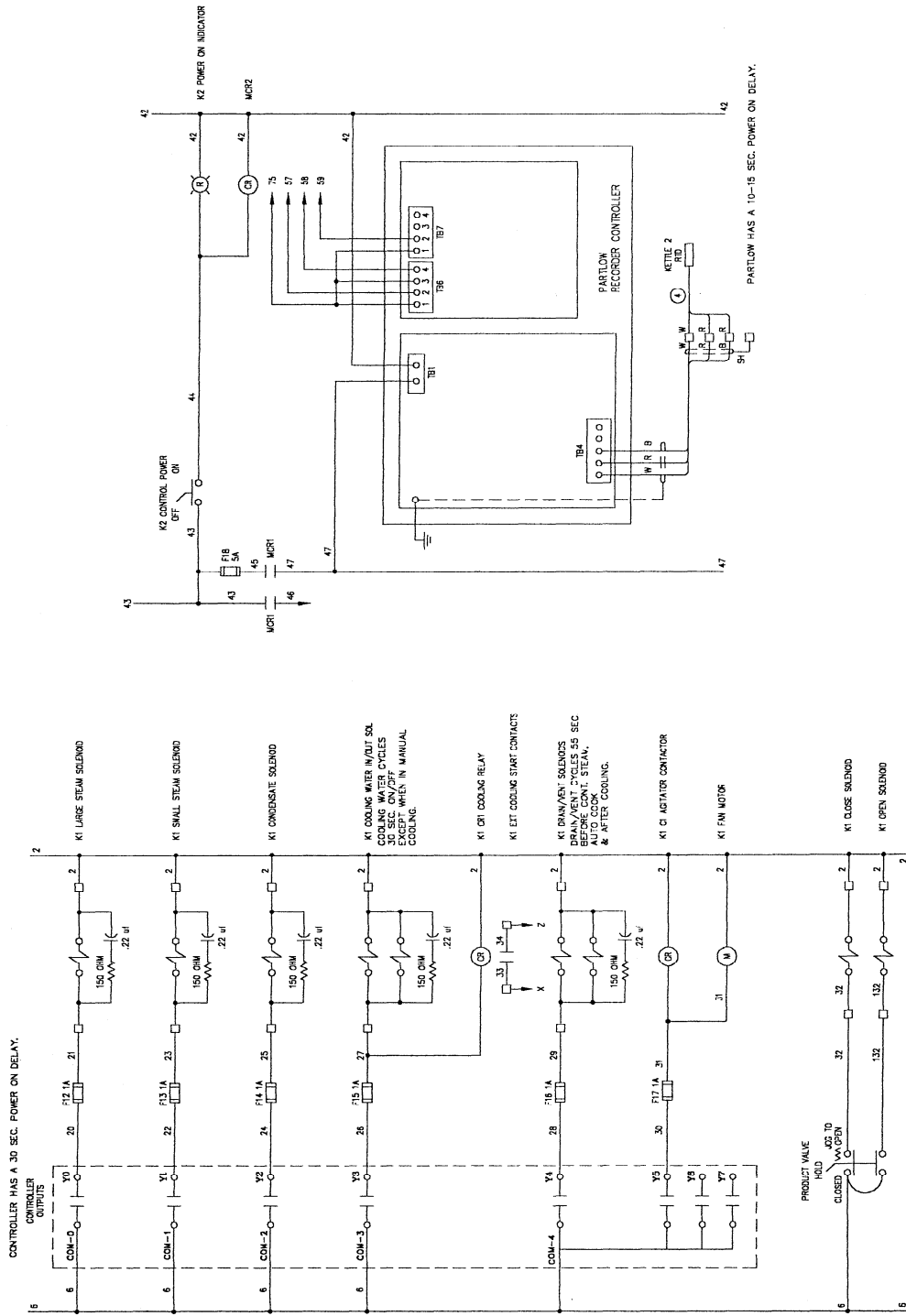
REV: C  
 DRAWING NUMBER: 11610  
 2 of 2

The company is not responsible for any errors or omissions in this drawing. It is the user's responsibility to verify all dimensions and specifications before use. The company is not responsible for any damage or injury resulting from the use of this drawing.





REV	DESCRIPTION	BY	DATE
1	REVISIONS		
<b>J.C.PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO. MD. 21220 PHONE (410) 981-9600 FAX (410) 981-6044			
DESIGNED BY	JES	DATE	01/02/02
APPROVED BY		REVISIONS	NONE
DRAWING NUMBER	C	REV	2 of 5
<b>ELECTRICAL SCHEMATIC 208/230/380/460V DUAL TAP CONTROL PANEL W/RELAYS</b>		This drawing and all information contained therein is the property of J.C. Pardo & Sons, Inc. It is to be used only for the project and location specified. It is not to be reproduced, copied, or distributed in any form without the written consent of J.C. Pardo & Sons, Inc.	

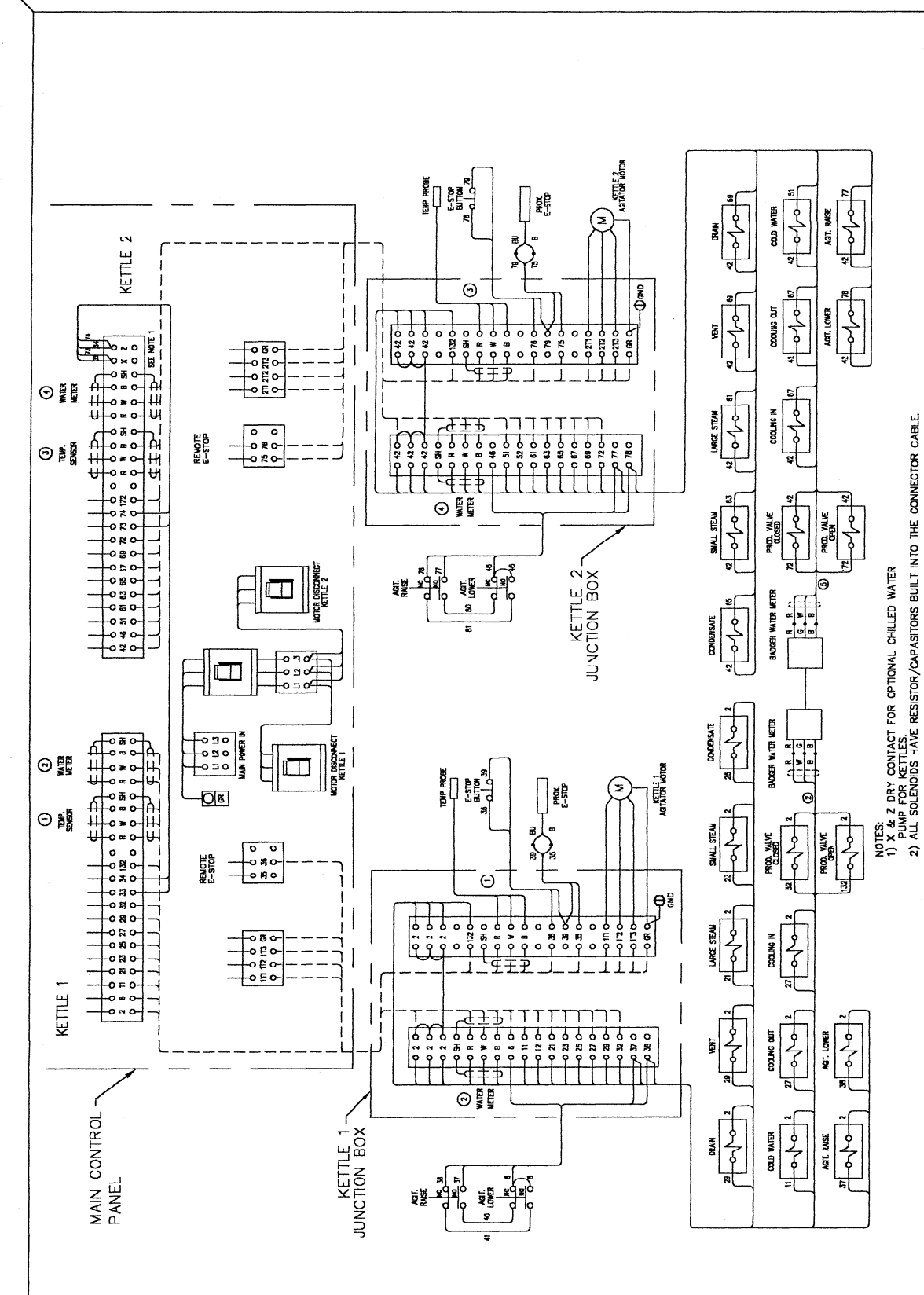


REV.	DESCRIPTION	BY	DATE
	REVISIONS		
<b>J.C. PARDO &amp; SONS INC.</b> 1850 REAMES RD. BALTO MD. 21220 PHONE (410) 381-3800 FAX (410) 391-0842			
DESIGNED BY	DATE	APPROVED BY	SCALE
JES	01/02/02	NONE	NONE
DRAWN BY	DATE	SCALE	
JES	01/02/02	NONE	
ELECTRICAL SCHEMATIC 208/230/380/460V DUAL IAK CONTROL PANEL W/RELAYS		SIZE	DRAWING NUMBER
		C	ES-0244
		REV.	SHEET
		3 of 5	

This drawing is the property of J.C. Pardo & Sons, Inc. and is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of J.C. Pardo & Sons, Inc.







NOTES:  
 1) Z DRY CONTACT FOR OPTIONAL CHILLED WATER PUMP FOR KETTLES.  
 2) ALL SOLENOIDS HAVE RESISTOR/CAPACITORS BUILT INTO THE CONNECTOR CABLE.

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	REVISIONS						

<b>J.C. PARDO &amp; SONS INC.</b> 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-8000	DESIGNED BY JES	DATE 01/02/02	APPROVED BY NONE
---	--------------------	------------------	---------------------

ELECTRICAL SCHEMATIC 208/230/380/460V DUAL TANK CONTROL PANEL W/RELAYS	DRAWING NUMBER ES-0244
---	---------------------------

## INCLINED AGITATOR KETTLE OPERATING AND CLEANING INSTRUCTIONS

### OPERATING INSTRUCTIONS

Your kettle has been equipped with a control panel that has some or all of the following functions:

12. Main POWER switch
13. Temperature control
14. 24 hour chart recorder
15. KETTLE RUN push button
16. Agitator speed control with variable settings
17. Agitator STOP/START
18. Potable water meter with OFF/ON switch and push button to add water
19. Manual COOL water switch
20. Kettle selector switch for CONTINUOUS, OFF, COOK
21. SIMMER switch
22. Product VALVE OPEN/CLOSED

#### Operating the Kettle

10. To operate the system the main power switch on the control panel must be turned on. The temperature control computer will run through its diagnostics for about one minute.
11. To set desired temperature, turn switch to COOK. This activates the temperature controller. The temperature displayer and the actual temperature will appear. To change the temperature set point, press the push button with “+” to raise or increase the temperature or press the button with “-“ to decrease or lower the temperature.
12. Push the button marked KETTLE RUN and the steam will come on to heat the kettle and its contents until the set point temperature is reached. It will cycle off and on to maintain the set point temperature.
13. To start the agitator, press the button marked AGITATOR START and a green light will indicate the agitator is on.
14. To stop the agitator, press the red AGITATOR STOP mushroom button.
15. To change the speed of the agitator, turn the SPEED CONTROL knob to the right to increase the speed or to the left to decrease the speed. As a safety precaution, always turn the speed to “0” when kettle is not in use and before use.
16. To add ingredients to the kettle, push AGITATOR STOP button. Steam heating will continue in the jacket and the agitator must be started again as soon as possible or product might burn on the surface of the kettle.
17. CONTINUOUS STEAM is a manual override allowing steam into the kettle but with no temperature control.
18. SIMMER allows maintenance to the set point temperature but gently introduces heat into the kettle.

Ready to pump food out of kettle (Metering Filling Station, MFS, should be connected to the kettle during the sanitation process)

6. Foods must be cooked to a minimum of 165°F to kill dangerous pathogens and must be at least this temperature when it casings are filled. Set temperature on the control panel to at least 165°F before pumping.
7. Pump food through MFS to heat hoses and MFS parts until at least 165°F can be maintained when product exits the MFS. Product may be poured back into the kettle for reheating before pumping.
8. Put down cover of kettle to maintain heat and to maintain a moist atmosphere in the kettle which will make cleaning easier.
9. Pump and empty the kettle as quickly as possible to prevent over-cooking of product and to maintain quality, consistency and temperature.
10. Temperature may be turned OFF or placed on SIMMER when kettle product reaches the steam jacketed area to reduce chances of burning while pumping.

To cool and blend products without heat

4. Turn the main power switch to ON.
5. Turn the MANUAL WATER COOLING switch to ON. This will start the flow of cold water from the ice builder into the jacket of the kettle. When in this mode the temperature controller will read the temperature of the product only and serve no other function.
6. When cooking a product that is too hot, MANUAL COOLING can be used. Turn on MANUAL COOLING. When sufficient cooling has been achieved, turn the switch off. The kettle jacket will drain and steam will automatically come on to continue cooking if the set point has not been lowered.

To add Potable water to the kettle

6. Faucet handle must be completely open and the main power must be on.
7. Set point the volume of water needed by changing the digits on the meter.
8. Turn METERED WATER switch to ON. Water will begin filling the desired number of gallons and stop automatically. The amount of water that has been metered can be read above the set point.
9. Additional water may be metered by resetting meter and will accumulate on the meter as long as it is not turned off.
10. Additional water may be added by pressing the black button marked PUSH TO ADD MORE WATER.

## **CLEANING INSTRUCTIONS**

As with all equipment that has electrical components, care must be exercised when using water and chemicals to clean food service equipment. Use a mild detergent following instructions of the chemical manufacturer. Do not spray water on electrical control panel or components. Do not use harsh or caustic chemicals, especially on o-rings and gaskets.

7. Rinse out food debris from the kettle and flush through the metering filling station (MFS or food pump) if they are still connected. If the kettle is not connected to the food pump, open the valve and allow rinse water to flush into the floor drain.
8. Remove agitator arm:
  - a. Rotate the agitator until the pull pin is visible.
  - b. Turn power to OFF as a safety precaution.
  - c. Pull quick release pin out.
  - d. Slide coupling upward.
  - e. Carefully lift agitator, pull back and lift out.
  - f. Remove scraper blades from agitator by using the spring removal tool provided with the kettle.
  - g. Wash agitator arm, scraper blades, and springs with mild dish detergent or in dish machine. Air dry.
9. Wash the inside of the kettle with a mild dish detergent as you would any pot or pan. Flush liquid through MFS or by opening the valve. Rinse thoroughly. Allow to air dry.
10. Open kettle valve. Remove the valve and tee from the bottom of the kettle by removing the clamp. Remove o-rings. Wash and dry thoroughly. When re-installing the valve, apply USDA approved food grade grease (Chesterton 622 or equal) to o-rings. Gently push tee and valve body in place and secure with clamps.
11. Remove temperature sensor probe by removing clamp. Slide sensor out of seal holder. Remove o-rings. Clean sensor, seal and o-rings. Before re-installing, apply a liberal amount of USDA approved food grade grease on o-rings.

#### REASSEMBLY

1. Install scraper blades with springs on agitator arm.
2. Lift agitator arm into kettle, set in place by the drive shaft and slide the slip collar or coupling into place and put quick release pin into both.
3. Turn Control Power on. Grease o-rings for the valve and install o-rings.
4. To assemble the valve actuator and stem: a. reconnect the air line, b. place stem in valve actuator, c. apply pressure to the top of the stem, d. while applying pressure to the stem have someone turn the valve switch to the open position. The stem should lower into the actuator.
5. Attach tee pipe to bottom of kettle with clamp.
6. Attach valve actuator to the tee with clamp.
7. Turn product valve switch to the closed position and kettle valve will close.
8. Grease o-rings for the temperature probe and install o-rings on synthetic seal holder.
9. Slide temperature probe into seal holder.
10. Slide both into opening in kettle and attach with clamp.

DAILY PRE-START UP

4. The operator must check the kettle, springs and scraper blades for proper installation before turning kettle on.
5. Make sure the connecting coupling from the drive shaft to the agitator is properly installed with the quick release pin fully engaged.
6. Label and place clean chart on chart recorder.

If the above cannot be achieved, call your maintenance supervisor or service contractor before proceeding.

## PREVENTIVE MAINTENANCE

### COOK/CHILL MIXER & PASTA KETTLES

#### A. **AUTOMATIC DUMP VALVE**

##### **Weekly**

- Check air collector regulator for moisture, dirt, and proper pressure
- Check all orings and seals and gaskets
- Check valve operation
- Lubricate with light oil when needed
- Check air hose for leaks or signs of wear

#### B. **TILT MECHANISM ( Hydraulic Tilt )**

##### **Weekly**

- Check for leaks
- Check for smooth operation
- Check switches

##### **Yearly**

- Change hydraulic fluid every two years. (1 1/2 gallons of **FOOD GRADE** hydraulic fluid) ( Shell Telis #5 )

##### **( Electric Tilt )**

##### **Weekly**

- Check for smooth operation
- Check switches

##### **Monthly**

- Check for movement in mechanism
- Grease trunnions monthly ( **Food Grade Grease** )

#### C. **AIR PRESSURE**

##### **Weekly**

- 45 psi dump valve - 15 psi for jacket purge
- Air must be clean and dry
- Check all air lines & fittings for leaks

#### D. **STEAM TRAP**

##### **Monthly**

- Check proper operation

**PREVENTIVE  
MAINTENANCE**

**COOK/CHILL MIXER & PASTA KETTLES (continued)**

**E. SAFETY VALVE**

**Weekly**

- Check for leakage
- Steam pressure 65 psi. max.
- Safety set at 100 psi.

**F. LEAKS**

**Weekly**

- Check for leaks of any type ( water - steam - hydraulic )  
( **Leaks take away from performance and will lead to costly repair** )

**G. Control Panels**

**Weekly**

- Signs of water damage
- Check operation of all controls
- Water meter operation
- Temp read outs
- Temp charting
- Temp controlling
- RTD adjustments
- Mixer operation & speed control
- Gentle heat operation
- product valve operation



## **IA-MKDL-60-CC**

- **Make sure kettle is level, equipment can move as floors settle**
- **Make sure kettle is bolted securely to floor, bolts may loosen after time**
- **Check the incoming power and amp draws (per rating plate)**
- **Check incoming air pressure (1" line 1cfm @ 90psi.)**
- **Check air pressure regulator/collector for draw off valve (45psi.)**
- **Check air pressure regulator for kettle jacket purge (15psi.)**
- **Check air collector regulator for moisture, dirt (Must be clean & dry)**
- **Check all o-rings and shaft seal for wear and proper lubrication**
- **Check the installation 3" Flush Piston Draw Off Valve**
- **Check all air hoses for leaks and signs of wear**
- **Check incoming steam pressure (3/4"line / 320PPM / 65psi.)**
- **Check the steam trap for proper operation (clean or replace if needed)**
- **Check the operation of safety valve 100psi. rating**
- **Check for steam leaks (Inlets and Returns)**
- **Check for the proper clearance where drive shaft penetrates the kettle**
- **Make sure temperature sensor is properly installed**
- **Check chill water supply and return lines for leaks.**
- **Check the control panel for any signs of corrosion moisture**
- **Check the complete operation of all kettle controls**
- **Check the mixer operation (Speed control, Emergency stop)**
- **Check the idler bearing and idler busing for wear**
- **Check the kettle tilt (up and down)**
- **Check hydraulic fluid level**
- **Check hydraulic lines for leaks and signs of wear**
- **Change hydraulic fluid yearly (ISO 46 20 weight Food Grade)**
- **Grease tilt mechanism monthly (Food grade grease)**
- **Check the operation of 3" Flush Piston Draw Off Valve**
- **Check water meter operation**
- **Make sure the Partlow chart recorder/controller is (controlling, reading, and charting correctly)**
- **Check the cooking operation in both automatic and in manual modes**
- **Check the operation of gentle heat mode**
- **Check the operation of the chill mode**
- **Check kettle cover hinge tension and fasteners**

## **IA-MKDL-100-CC**

- Make sure kettle is level, equipment can move as floors settle
- Make sure kettle is bolted securely to floor, bolts may loosen after time
- Check the incoming power and amp draws (per rating plate)
- Check incoming air pressure (1" line 1cfm @ 90psi.)
- Check air pressure regulator/collector for draw off valve (45psi.)
- Check air pressure regulator for kettle jacket purge (15psi.)
- Check air collector regulator for moisture, dirt (Must be clean & dry)
- Check all o-rings and shaft seal for wear and proper lubrication
- Check the installation 3" Flush Piston Draw Off Valve
- Check all air hoses for leaks and signs of wear
- Check incoming steam pressure (3/4"line / 320PPM / 65psi.)
- Check the steam trap for proper operation (clean or replace if needed)
- Check the operation of safety valve 100psi. rating
- Check for steam leaks (Inlets and Returns)
- Check for the proper clearance where drive shaft penetrates the kettle
- Make sure temperature sensor is properly installed
- Check chill water supply and return lines for leaks.
- Check the control panel for any signs of corrosion moisture
- Check the complete operation of all kettle controls
- Check the mixer operation (Speed control, Emergency stop)
- Check the idler bearing and idler busing for wear
- Check the kettle tilt (up and down)
- Check hydraulic fluid level
- Check hydraulic lines for leaks and signs of wear
- Change hydraulic fluid yearly (ISO 46 20 weight Food Grade)
- Grease tilt mechanism monthly (Food grade grease)
- Check the operation of 3" Flush Piston Draw Off Valve
- Check water meter operation
- Make sure the Partlow chart recorder/controller is (controlling, reading, and charting correctly)
- Check the cooking operation in both automatic and in manual modes
- Check the operation of gentle heat mode
- Check the operation of the chill mode
- Check kettle cover hinge tension and fasteners

## **IA-MKDL-150-CC**

- Make sure kettle is level, equipment can move as floors settle
- Make sure kettle is bolted securely to floor, bolts may loosen after time
- Check the incoming power and amp draws (per rating plate)
- Check incoming air pressure (1" line 1cfm @ 90psi.)
- Check air pressure regulator/collector for draw off valve (45psi.)
- Check air pressure regulator for kettle jacket purge (15psi.)
- Check air collector regulator for moisture, dirt (Must be clean & dry)
- Check all o-rings and shaft seal for wear and proper lubrication
- Check the installation 3" Flush Piston Draw Off Valve
- Check all air hoses for leaks and signs of wear
- Check incoming steam pressure (3/4"line / 320PPM / 65psi.)
- Check the steam trap for proper operation (clean or replace if needed)
- Check the operation of safety valve 100psi. rating
- Check for steam leaks (Inlets and Returns)
- Check for the proper clearance where drive shaft penetrates the kettle
- Make sure temperature sensor is properly installed
- Check chill water supply and return lines for leaks.
- Check the control panel for any signs of corrosion moisture
- Check the complete operation of all kettle controls
- Check the mixer operation (Speed control, Emergency stop)
- Check the idler bearing and idler busing for wear
- Check the kettle tilt (up and down)
- Check hydraulic fluid level
- Check hydraulic lines for leaks and signs of wear
- Change hydraulic fluid yearly (ISO 46 20 weight Food Grade)
- Grease tilt mechanism monthly (Food grade grease)
- Check the operation of 3" Flush Piston Draw Off Valve
- Check water meter operation
- Make sure the Partlow chart recorder/controller is (controlling, reading, and charting correctly)
- Check the cooking operation in both automatic and in manual modes
- Check the operation of gentle heat mode
- Check the operation of the chill mode
- Check kettle cover hinge tension and fasteners

## **IA-MKDL-200-CC**

- **Make sure kettle is level, equipment can move as floors settle**
- **Make sure kettle is bolted securely to floor, bolts may loosen after time**
- **Check the incoming power and amp draws (per rating plate)**
- **Check incoming air pressure (1" line 1cfm @ 90psi.)**
- **Check air pressure regulator/collector for draw off valve (45psi.)**
- **Check air pressure regulator for kettle jacket purge (15psi.)**
- **Check air collector regulator for moisture, dirt (Must be clean & dry)**
- **Check all o-rings and shaft seal for wear and proper lubrication**
- **Check the installation 3" Flush Piston Draw Off Valve**
- **Check all air hoses for leaks and signs of wear**
- **Check incoming steam pressure (3/4"line / 320PPM / 65psi.)**
- **Check the steam trap for proper operation (clean or replace if needed)**
- **Check the operation of safety valve 100psi. rating**
- **Check for steam leaks (Inlets and Returns)**
- **Check for the proper clearance where drive shaft penetrates the kettle**
- **Make sure temperature sensor is properly installed**
- **Check chill water supply and return lines for leaks.**
- **Check the control panel for any signs of corrosion moisture**
- **Check the complete operation of all kettle controls**
- **Check the mixer operation (Speed control, Emergency stop)**
- **Check the idler bearing and idler busing for wear**
- **Check the kettle tilt (up and down)**
- **Check hydraulic fluid level**
- **Check hydraulic lines for leaks and signs of wear**
- **Change hydraulic fluid yearly (ISO 46 20 weight Food Grade)**
- **Grease tilt mechanism monthly (Food grade grease)**
- **Check the operation of 3" Flush Piston Draw Off Valve**
- **Check water meter operation**
- **Make sure the Partlow chart recorder/controller is (controlling, reading, and charting correctly)**
- **Check the cooking operation in both automatic and in manual modes**
- **Check the operation of gentle heat mode**
- **Check the operation of the chill mode**
- **Check kettle cover hinge tension and fasteners**

## **IA-MKDL-300-CC**

- Make sure kettle is level, equipment can move as floors settle
- Make sure kettle is bolted securely to floor, bolts may loosen after time
- Check the incoming power and amp draws (per rating plate)
- Check incoming air pressure (1" line 1cfm @ 90psi.)
- Check air pressure regulator/collector for draw off valve (45psi.)
- Check air pressure regulator for kettle jacket purge (15psi.)
- Check air collector regulator for moisture, dirt (Must be clean & dry)
- Check all o-rings and shaft seal for wear and proper lubrication
- Check the installation 3" Flush Piston Draw Off Valve
- Check all air hoses for leaks and signs of wear
- Check incoming steam pressure (3/4"line / 320PPM / 65psi.)
- Check the steam trap for proper operation (clean or replace if needed)
- Check the operation of safety valve 100psi. rating
- Check for steam leaks (Inlets and Returns)
- Check for the proper clearance where drive shaft penetrates the kettle
- Make sure temperature sensor is properly installed
- Check chill water supply and return lines for leaks.
- Check the control panel for any signs of corrosion moisture
- Check the complete operation of all kettle controls
- Check the mixer operation (Speed control, Emergency stop)
- Check the idler bearing and idler busing for wear
- Check the kettle tilt (up and down)
- Check hydraulic fluid level
- Check hydraulic lines for leaks and signs of wear
- Change hydraulic fluid yearly (ISO 46 20 weight Food Grade)
- Grease tilt mechanism monthly (Food grade grease)
- Check the operation of 3" Flush Piston Draw Off Valve
- Check water meter operation
- Make sure the Partlow chart recorder/controller is (controlling, reading, and charting correctly)
- Check the cooking operation in both automatic and in manual modes
- Check the operation of gentle heat mode
- Check the operation of the chill mode
- Check kettle cover hinge tension and fasteners